State of California
THE RESOURCES AGENCY
Department of Water Resources

BULLETIN No. 130-63

HYDROLOGIC DATA: 1963

Volume IV: SAN JOAQUIN VALLEY

MAY 1965

HUGO FISHER
Administrator
The Resources Agency

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE
Director
Department of Water Resources

State of California

THE RESOURCES AGENCY

ERRATA SHEET

Bulletin No. 130-63, Hydrologic Data 1963
Volume IV
San Joaquin Valley

Page vi	Delete Surface Water Quality Conditions...28
Page C-33	6S/22E-23R01 M should read 16S/22E-23R01 M
Page C-39	8S/25E-12Q01 M should read 18S/25E-12Q01 M
Page C-42	9S/23E-14R01 M should read 19S/23E-14R01 M
Page C-43	Second state well number should read 20S/24E-16N01 M
Page C-61	Second state well number should read 28S/25E-34J01 M
Page C-73	Second state well number should read 28S/24E-28A01 M
Page C-79	Second state well number should read 20S/15E-25D01 M
	Third state well number should read 20S/15E-32A01 M
Page E-5	Eighth paragraph should read ... listed in Table 12, instead of Table E-5

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ORGANIZATION OF BULLETIN NO. 130 SERIES

Volume I - NORTH COASTAL AREA

Volume II - NORTHEASTERN CALIFORNIA

Volume III - CENTRAL COASTAL AREA

Volume IV - SAN JOAQUIN VALLEY

Volume V - SOUTHERN CALIFORNIA

Each volume consists of the following:

TEXT and

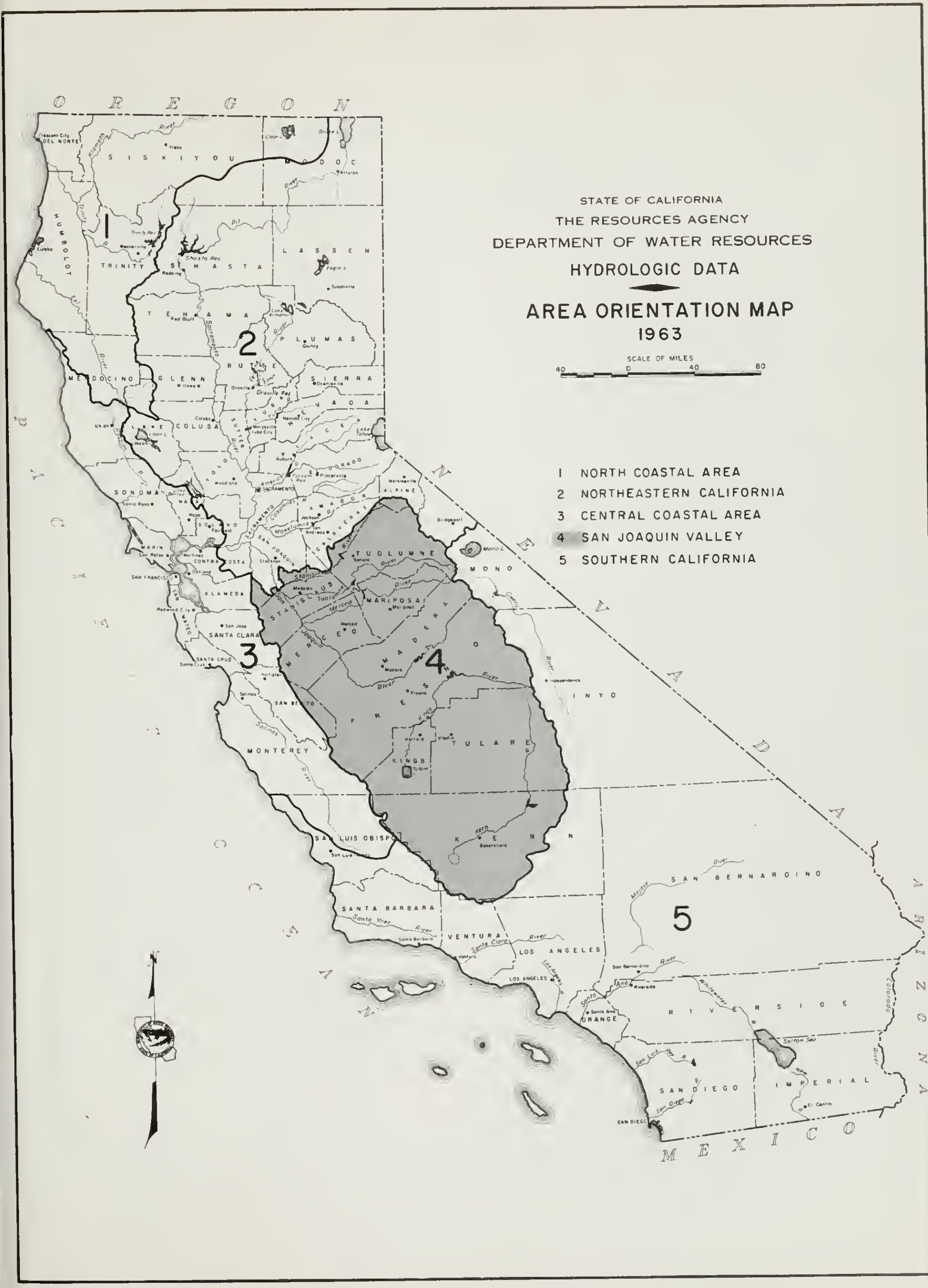
Appendix A - CLIMATE

Appendix B - SURFACE WATER FLOW

Appendix C - GROUND WATER MEASUREMENTS

Appendix D - SURFACE WATER QUALITY

Appendix E - GROUND WATER QUALITY


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
HYDROLOGIC DATA
AREA ORIENTATION MAP
1963
SCALE OF MILES
40 0 40 80
1 NORTH COASTAL AREA
2 NORTHEASTERN CALIFORNIA
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ATE OF CALIFORNIA—RESOURCES AGENCY WILLIAM E. WARNE, Direct

EPARTMENT OF WATER RESOURCES
O. BOX 388
CRAMENTO

March 15, 1965

Honorable Edmund G. Brown, Governor,
and Members of the Legislature of
the State of California

Gentlemen:

Bulletin No. 130-63, entitled "Hydrologic Data, Volume IV, San Joaquin Valley", presents data on hydrologic conditions in the San Joaquin Valley during the 1963 reporting year.

This bulletin is the first of a series which incorporates data on surface water, ground water, and climate previously published annually in Bulletins No. 23, 39, 65, 66, and 77. With the inauguration of the new series, publication of the earlier reports is discontinued.

Bulletin No. 130 will be published annually in five volumes, each volume to report hydrologic data for one of five specific reporting areas of the State. The area orientation map on page iii delineates these areas. Page ii outlines the organization of the bulletin, its volumes, and appendixes.

The collection and publication of data as contained in Bulletin No. 130 are authorized by Sections 225, 226, 229, 230, 232, 345, 12609, and 12616 of the California Water Code.

The basic data programs of the Department of Water Resources have been designed to supplement the activities of other agencies to satisfy specific needs of the State. Bulletin No. 130 presents to the public useful, comprehensive, accurate, timely hydrologic data, which are prerequisites for effective planning, design, construction, and operation of water facilities.

Collection of much of the data presented has been possible only because of the generous cooperation and assistance of other agencies and many individuals; these cooperators are shown in the tables where appropriate. Without this assistance Bulletin 130-63 would be a much less valuable tool.

Sincerely yours,

William E. Warne

Director

State of California
The Resources Agency
Department of Water Resources

EDMUND G. BROWN, Governor
HUGO FISHER, Administrator, The Resources Agency of California
WILLIAM E. WARNE, Director, Department of Water Resources
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Reviewed and Coordinated by Division of Resources Planning Data Coordination Section

CHAPTER I

INTRODUCTION

This is Volume IV in a series of basic data reports presented under a new format entitled "Bulletin 130-63, Hydrologic Data." The five volumes of the bulletin embrace the entire State of California, each volume being prepared by the area branch or district of the department responsible for the publication of basic data collected in its respective area. These areas are shown on the frontispiece map.

This report contains a record of hydrologic data collected and assembled by the San Joaquin Valley Branch of the Department of Water Resources. It brings together in a permanent and usable form the following types of hydrologic basic data collected during the respective time intervals as shown below:

Surface Water Flows	October 1, 1962 - September 30, 1963
Diversion Data	October 1, 1962 - September 30, 1963
Climate Data	July 1, 1962 - June 30, 1963
Ground Water Level Measurements	July 1, 1962 - June 30, 1963
Surface Water Quality	October 1, 1962 - September 30, 1963
Ground Water Quality	October 1, 1962 - September 30, 1963

Location and General Features of the San Joaquin Valley

The San Joaquin Valley includes approximately the southern two-thirds of the Great Central Valley of California. It is a broad structural trough surrounded on three sides by mountains: the Sierra Nevada on the east, the Coast Range on the west, and the Tehachapi and San Emigdio Mountains on the south. It is separated from the Sacramento Valley on the north by the combined deltas of the Sacramento and San Joaquin Rivers. The valley extends 250 miles southeasterly from Stockton to Grapevine at the foot of the Tehachapi Mountains; the width of the valley floor ranges from 25 miles near Bakersfield to 55 miles near Visalia and averages about 35 miles. The area of the valley floor is 10,000 square miles, excluding the rolling foothills that skirt the mountains.

East of the San Joaquin Valley the Sierra Nevada rises in a distance of 45 to 60 miles to altitudes of 14,000 feet or more; to the west the Coast Range rises to 6,000 feet; and on the south the valley is enclosed by the San Emigdio and Tehachapi Mountains which rise to altitudes of about 8,000 feet. Only at Carquinez Strait, a break in the Coast Range east of San Francisco Bay, does the Great Central Valley open to the sea.

The valley floor rises gently from sea level at the north end to 500 feet above sea level about 21 miles south of Bakersfield; alluvial fans along the valley borders rise to altitudes as high as 700 to 1,800 feet. The gentle northward gradient of the valley floor is interrupted by a low divide in the neighborhood of the Kings River, about 15 miles west of Hanford; the San Joaquin Valley is divided at that point into two separate drainage basins - the San Joaquin River Basin and the Tulare Basin.

Scope of Report

The areal scope of this volume of the report is depicted on Plates A-1, B-1, C-1, D-1, and E-1. The location of climatological stations for which data are presented is shown on Plate A-1 and the location of surface water gaging stations on Plate B-1. The basins, subbasins, or areas in the San Joaquin Valley for which ground water levels are reported are shown on Plate C-1. The locations of surface water sampling stations are shown on Plate D-1, and the basins, subbasins, or areas used to locate the ground water quality samples are shown on Plate E-1.

The following chapters present information on precipitation, evaporation, and temperature, surface runoff, diversions, reservoir storage, imported water supplies, ground water conditions, and quality of surface and ground water.

The tabulated basic data are presented in Appendixes A through E. These appendixes include all basic data collected pertaining to climate, surface water flow, ground water level measurements and water quality analyses of surface and ground water.

Numbering System Designations

In the paragraphs which follow, there are presented descriptions of the various numbering and coding systems used in this report. These systems are utilized to facilitate machine data processing.

Region Designation

The region designations used in this report pertain to geographic areas as defined in Section 13040 of the Water Code. The State is divided into nine regions and the San Joaquin Valley area encompasses that portion of the Central Valley region south of the north boundary of the Stanislaus River drainage area.

Climate Station Designation

The climatological station designations used herein and in Appendix A are based on the drainage basin and alpha number. Stations are also named and latitude and longitude locations are determined to the nearest minute.

Each main drainage basin is assigned a letter and each subbasin a number, as shown on Plate A-1 of this report.

The alpha order number is assigned each station to denote its order in alphabetical sequence for machine processing. The subnumbers are used to avoid duplication of the original four-digit system for machine processing. Only 21 columns are available for station name; therefore, some abbreviations are necessary.

Surface Water Gaging Station Designation

The index number for each gaging station is composed of a number which begins with an alphabetical letter designating the hydrographic area, followed by the first digit which indicates the main river basin. The second digit refers to a tributary of the main river basin. The hydrographic area and the river basins are outlined on Plate B-1. The remaining three digits are used to number stations in an upstream direction with the lowest number at or near the mouth. The digit 9, which is the third from the left, indicates that the station is a surface gravity diversion station. Each station is listed by name as well as by machine index number.

Ground Water Basin and Area Designation

With respect to the basin numbering system code, a decimal numbering system of the form 0-00.00 has been used. The number to the left of the dash refers to the geographic region described above. On the right of the dash, the first two digits refer to a hydrographic unit, generally designated as a basin, valley, or area. These are followed by decimals which designate a subbasin, area, or subarea within the basin. These basins, areas, or subareas are shown on Plates C-1 and C-2.

Well-numbering System

The state well-numbering system used in this report is based on township, range, and section subdivision of the Public Land Survey. It is the system used in all ground water investigations and for numbering all wells for which data are published or filed by the Department of Water Resources. In this report, the number of a well assigned in accordance with this system is referred to as the state well number.

Under this system, each section is divided into 40-acre tracts lettered as follows:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Wells are numbered within each 40-acre tract according to the chronological sequence in which they have been assigned state well numbers. For example, a well which has the number 16S/15E-17K1 M would be in Township 16 South, Range 15 East, Section 17, M.D.B.&M., and would be further designated as the first well assigned a state well number in Tract K. In this volume, well numbers are referenced to the Mount Diablo Base and Meridian (M), or the San Bernardino Base and Meridian (S).

CHAPTER II

CLIMATE

Introduction

The climate of the San Joaquin Valley is characterized by hot summers and mild winters. Midday temperatures in midsummer are high, occasionally 110° F. with extremes as high as 120° F. having been recorded. The diurnal temperature variation also is extreme, especially in summer when frequently it is 40° F. or more.

Annual precipitation decreases from north to south and east to west across the valley. The average annual precipitation ranges from 5.38 inches at Buttonwillow in the southern part of the valley to 17.42 inches at Knights Ferry in Stanislaus County at the northern end of the valley. Precipitation figures are based on the 50-year mean period 1910-1960.

As moist air moves in from the Pacific Ocean and ascends the western slope of the Sierra Nevada, precipitation increases and reaches a maximum in the higher parts of the range. The mean annual precipitation exceeds 40 inches in much of the higher mountainous part of the Sierra Nevada tributary to the San Joaquin Valley and exceeds 60 inches in small isolated areas. During winter, snowfall is heavy in the Sierra Nevada at elevations above 3,000 to 4,000 feet.

Precipitation and runoff in the Central Valley vary not only from winter to summer, but from year to year.

Scope

The area covered by this report and its geographical relation to the Central Valley Drainage Basin are both shown on Plate A-1.

The Department of Water Resources gathers basic data relating to climatic phenomena in the San Joaquin Valley. This involves field measurements and office computations to determine the instantaneous, daily, monthly, seasonal, and annual temperatures, precipitation, and evaporation.

The field activities include the installation and maintenance of weather stations. The installed equipment obtains measurements of: (1) daily maximum and minimum temperatures; (2) precipitation - annual amounts from storage gages in remote areas, daily amounts from standard rain gages, and instantaneous amounts from recording rain gages; (3) evaporation in inches per day; and (4) wind movement in miles per day. In addition, similar data are obtained from many public and private agencies and individuals.

The department contributes to the cooperative program with the U. S. Weather Bureau by providing services for the installation, maintenance, and operation of approximately 100 stations in the State, eight of which are located in the San Joaquin Valley. The U. S. Weather Bureau publishes these data in the official U. S. Weather Bureau publication, "Climatological Data."

The office activities consist of computation and compilation of approximately 150 monthly climatological station observations to provide a continuous and current record. This includes the computation of intensities from recording rain gages and preparation of hourly precipitation records for future use in development of rainfall intensity-duration-frequency relationships.

Precipitation

Precipitation during the 1962-63 season for the San Joaquin Valley area as a whole was normal. This is a continuation of two years of normal rainfall in the valley preceded by three years of below-normal precipitation.

This year's precipitation, measured from July 1, 1962, through June 30, 1963, varied from 109 percent of normal at Modesto on the north to 74 percent at Bakersfield on the south. The greatest deviations from normal were 131 percent at Mariposa and 65 percent at Maricopa.

The San Joaquin Valley area may be divided into three general parts: the west side, the valley floor, and the east side or Sierra Nevada. Table 1, "Seasonal and Mean Precipitation at Selected Stations in the San Joaquin Valley," shows the distribution of rainfall west to east across the valley. Averages of precipitation normals show for the west side stations 6.3 inches, for the valley floor 9.7 inches, and for the east side 16.6 inches.

The seasonal deviation from normal of the three general areas is 86 percent on the west side, 103 percent on the valley floor, and 109 percent on the east side.

TABLE 1

SEASONAL AND MEAN PRECIPITATION AT SELECTED STATIONS IN THE SAN JOAQUIN VALLEY

Alpha Order Number	Station	County	50-Year Mean 1910-1960 In inches	1962-63 Season In inches	1962-63 Season Percent of Mean
West Side					
B8 6675	Panoche	San Benito	7.51	8.20	109
C0 1867	Coalinga 1 SE	Fresno	6.80	7.04	104
C0 4536	Kettleman Sta.	Kings	6.21	5.69	92
C0 1244	Buttonwillow	Kern	5.38	3.86	72
C7 5338	Maricopa	Kern	5.54	3.60	65
Valley Floor					
B0 5297-01	Manteca No. 2	San Joaquin	11.65	12.32	106
B0 5738	Modesto	Stanislaus	11.56	12.59	109
B0 9073	Turlock	Stanislaus	11.71	12.86	110
B0 5532	Merced Fire Sta. 2	Merced	11.89	12.31	104
B0 5233	Madera	Madera	10.11	9.62	95
C0 3257	Fresno WB A.P.	Fresno	9.65	11.59	120
C0 9367	Visalia	Tulare	9.39	9.08	97
C0 3747	Hanford	Kings	8.10	8.15	101
C0 9452	Wasco	Kern	6.32	7.15	113
C0 0442	Bakersfield A. P.	Kern	6.19	4.55	74
East Side					
B0 4590	Knights Ferry 2 SE	Stanislaus	17.42	20.31	117
B5 1588	Cathay Bull Run Rch.	Mariposa	19.72	24.50	124
B5 5346	Mariposa	Mariposa	28.94	37.80	131
B7 3261	Friant Gov't. Camp	Fresno	13.38	16.24	121
C2 6476	Orange Cove	Fresno	12.90	12.16E	94
C2 4890	Lemon Cove	Tulare	13.68	11.88	87
C0 7077	Porterville	Tulare	10.39	8.99	87

Three incidents of relative climatological importance occurred during the 1962-63 season: The storm of October 8 through October 15, 1962, raised the valley precipitation to 89 percent of normal after a dry fall; for the period January 30 through February 2, a high intensity storm struck the valley again, raising the averages to 71 percent of normal after the November and December doldrums of fog and cold; the gradual and general cool rains of April, followed by above-normal precipitation in May and June, resulted in normal to above normal precipitation for the year.

The occurrences described above are shown in Table 2 "Cumulative Monthly Precipitation at Key Stations in the San Joaquin Valley."

TABLE 2

CUMULATIVE MONTHLY PRECIPITATION
AT KEY STATIONS IN THE SAN JOAQUIN VALLEY
1962-63

Month	MODESTO			MERCED			MADERA			FRESNO			VISALIA			BAKERSFIELD		
	50-Year Mean 1910-60	1962-63 Season		50-Year Mean 1910-60	1962-63 Season		50-Year Mean 1910-60	1962-63 Season		50-Year Mean 1910-60	1962-63 Season		50-Year Mean 1910-60	1962-63 Season		50-Year Mean 1910-60	1962-63 Season	
	In inches	In inches	Percent of Mean	In inches	In inches	Percent of Mean	In inches	In inches	Percent of Mean	In inches	In inches	Percent of Mean	In inches	In inches	Percent of Mean	In inches	In inches	Percent of Mean
JULY	.01	.00	0	.01	.02	200	.01	.00	0	.01	T	0	.00	.00	0	.02	.00	0
AUGUST	.03	.00	0	.02	.02	100	.02	.00	0	.02	.00	0	.01	.00	0	.03	.00	0
SEPTEMBER	.19	T	0	.12	.02	17	.10	.00	0	.10	T	0	.08	.02	25	.12	.02	17
OCTOBER	.68	.59	87	.61	.55	90	.55	.47	85	.62	.73	118	.49	.42	86	.42	.25	60
NOVEMBER	1.68	1.23	73	1.76	.75	43	1.45	.57	39	1.43	.76	53	1.24	.42	34	.94	.25	27
DECEMBER	3.95	3.23	82	3.79	2.73	72	3.18	1.75	55	3.08	1.24	40	2.81	.47	17	1.87	.25	13
JANUARY	6.21	4.22	68	6.24	4.53	73	5.18	2.85	55	5.01	3.40	68	4.78	1.29	27	2.98	.37	12
FEBRUARY	8.17	6.90	84	8.35	7.48	90	7.04	5.19	74	6.64	5.41	81	6.57	3.42	52	4.01	1.91	48
MARCH	10.11	9.29	92	10.34	9.41	91	8.80	6.59	75	8.34	7.51	90	8.18	5.52	67	5.10	3.16	62
APRIL	11.02	12.26	111	11.37	11.79	104	9.70	9.30	96	9.22	11.17	121	9.00	8.67	96	5.79	4.01	69
MAY	11.46	12.58	110	11.81	12.25	104	10.04	9.62	96	9.54	11.56	121	9.33	8.89	95	6.11	4.27	70
JUNE	11.56	12.59	109	11.89	12.31	104	10.11	9.62	95	9.65	11.59	120	9.39	9.08	97	6.19	4.55	74

The San Joaquin Valley area normally receives 80 percent of the total seasonal precipitation by April 1. Also, by this date, maximum snowpack has been attained in the Sierras. On April 1, 1963, the valley floor had received rainfall in accumulated totals ranging from 92 percent of normal at Modesto on the north to 62 percent at Bakersfield on the south. Snowpack accumulation in the adjacent Sierras was only 35 percent of normal; however, the precipitation patterns of April, May, and June were far above normal: A new April high of 2.88 inches was established at Hanford superseding a long-term record of 2.67 inches recorded in 1926, and covering most of the Sierra watershed with excessive amounts. This resulted in normal to above normal precipitation, varying from 100 percent for the Tule River watershed to 130 percent for the Kings River watershed.

The distribution of rainfall on the entire area may be seen on Plate A-2, "Lines of Equal Precipitation, July 1, 1962, to June 30, 1963."

Temperatures, Evaporation, and Wind Movement

The distribution of temperatures, evaporation, and wind movement is presented in Table 3, "Average Temperatures, Total Evaporation and Average Wind Movement at Selected Stations in the San Joaquin Valley."

TABLE 3

AVERAGE TEMPERATURES, TOTAL EVAPORATION, AND AVERAGE WIND MOVEMENT AT SELECTED STATIONS IN THE SAN JOAQUIN VALLEY

Alpha Order Number	Station Name	Seasonal Ave. Temp. F° Max.	Min.	Mean	Seasonal Evaporation Total Inches	Wind Movement Av.Mi./Mo.
C0 0332-02	Arvin-Frick	73.6	42.9	58.8	65.5	1943
C0 2013	Corcoran El Rico 1	76.2	45.6	60.9	77.3	1650
C6 2222	Cummings Valley	69.9	35.6	52.8	79.1	2312
B4 2473	Don Pedro Res.	75.1	47.4	61.3	79.6	M
C5 4304	Isabella Res.	74.9	46.2	60.6	79.7	2035
B0 5117	Los Banos	74.4	45.8	60.1	86.1	2524
C1 6895	Pine Flat Dam	76.9	47.4	62.2	65.8	826
B6 7273	Raymond 9N	75.3	44.1	59.7	67.1	493
C3 8620	Success Dam	76.6	50.6	63.6	84.7	1489
C7 8755	Taft KTKR	75.2	48.9	62.1	93.1	970
C2 8868	Terminus Dam	75.4	52.0	63.7	M	1679*
C0 9145	U.S. Cotton Field Sta.	76.5	49.2	62.8	81.4	1560
B0 9565	Westley	M	M	M	53.2	M

* Last 10 months of record not complete
M = Missing

CHAPTER III

SURFACE WATER FLOW

Introduction

The variable flows of the streams entering the San Joaquin Valley on the east side result from the rainfall runoff occurring each winter and spring season, principally from December through April. The snowmelt runoff occurs during the spring and summer months from March through June. A combination of runoff from perennial tributaries and released stored water occurs during the summer and fall seasons. Flood flows in the valley floor channels are caused by runoff from rainfall and melting snow in the mountain areas in excess of mountain reservoir capacities, and by rainstorm runoff from the vast area of minor foothill watersheds and valley floor lands. In more recent years, flooding has become a lesser threat in the San Joaquin Valley as a result of additional reservoirs constructed on many of the tributary watersheds, including the Kern, Tule, Kaweah, Kings, San Joaquin, Merced, Tuolumne, and Stanislaus Rivers. With the completion of the Lower San Joaquin River Flood Control Project and eventual construction of additional dams and reservoirs, such as Buchanan on the Chowchilla River, Hidden on the Fresno River, and New Melones on the Stanislaus River, flooding will cease to be a problem in the San Joaquin Valley except in years of excessive precipitation.

Scope

The area covered by this report and its geographical relation to the Central Valley Drainage Basin is shown on Plate B-1.

Records of daily flows at 80 stream-gaging stations located on streams on the San Joaquin Valley floor and on streams entering the valley are presented in Appendix B of this report. Measurements of flows at 175 points of diversion from major streams on the valley floor, diversions and acreage irrigated by east side irrigation districts, and deliveries from canals of the Central Valley Project are also included in Appendix B.

Hydrography

The Department of Water Resources' hydrographic activities in the San Joaquin Valley area are divided into two major categories - field and office.

The field activities include:

1. Operation and maintenance of 46 stream-gaging stations.
2. Measurement of streamflows passing the gaging stations at stages varied enough to establish a stage-discharge relationship.
3. Measurement of the quantities of water diverted by major diverters from the San Joaquin, Merced, Tuolumne, Stanislaus, and Tule Rivers, and from Dry Creek near Modesto.
4. Construction of new installations as needed to augment the base network of gaging stations operated by the U. S. Geological Survey.
5. Cooperation with public and private agencies and with other branches within the department in the gathering of hydrographic data.

The office activities include:

1. Preparation of hydrographic data for computation by machine computation methods.
2. Manual computation and compilation of the discharge of stations not adaptable to machine computation.
3. Computation and compilation of quantities of water diverted for use in quantities per month for pumped diversions and quantities per day for gravity diversions.
4. Preparation of rating curves based on a series of discharge measurements on each stream.
5. Computation of rating formulas for the curves written in machine language for machine computation purposes.

Hydrographic Activities of Other Agencies

The U. S. Geological Survey maintains and operates 159 streamflow stations in addition to the stations operated by the department in the San Joaquin Valley area. A number of these are operated under the Federal-State Cooperative Surface Water Measurement Program. The records are published annually in a report by the U. S. Department of the Interior, Geological Survey, entitled "Surface Water Records of California, Volume 2, Northern Great Basin and Central Valley."

The United States Bureau of Reclamation maintains and operates seven streamflow gaging stations which monitor natural inflow to the southern San Joaquin Valley. These stations are in addition to the Bureau's operation stations on project canals. Data from both types of stations appear in an annual report published by the Bureau of Reclamation entitled "Fresno Field Division Water Supply."

The U. S. Corps of Engineers, the City and County of San Francisco, and other local agencies maintain and operate stream-gaging stations within the San Joaquin Valley area. These data are published in this report. The specific degree of cooperation by these agencies with the Department of Water Resources is detailed in footnotes to tables contained in this report.

Runoff and Water Supply

The streams entering the valley on the east side produce the major runoff to the valley. Rainfall runoff occurs principally during the period December to April, while snowmelt is the source during the spring and summer seasons from March through June. During the summer and fall seasons, runoff is a combination of flows from perennial tributaries and releases from reservoir storage.

Runoff Comparisons

Runoff conditions from year to year for a particular stream are compared to the mean runoff for that stream over a long period of time. The mean runoff is a base or normal used to compare runoff with any other year. Flow conditions on all major streams entering the valley are affected by man-made impairments such as reservoirs and diversions; therefore, the runoff comparisons are made with computed natural runoff which allows for effects of impairments. These computed natural or unimpaired runoffs are considered to be the flows that would occur if no impairments were above the points of measurement. Runoff normals are computed for the 50-year period October 1907 through September 1957.

The annual unimpaired runoff in percent of average for the 50-year normal for the period 1923 through 1963 on the major streams tributary to the San Joaquin Valley is shown in Table 4. The monthly unimpaired runoff for 1963 in percent of average based on the same 50-year period is shown for the same streams in Table 5.

The water supply available during the 1963 season was above normal on all major tributaries with the exception of the Tule River which was 89 percent of normal.

TABLE 4

ANNUAL UNIMPAIRED RUNOFF

(In percent of average)[a]

Water Year	Stanislaus River below Melones P. H.	Tuolumne River near La Grange	Merced River at Exchequer	San Joaquin River below Friant	San Joaquin River near Vernalis (b)	Kings River Inflow to Pine Flat	Kaweah River near Three Rivers	Tule River Inflow to Success	Kern River Inflow to Isabella
Average Annual Runoff (a)	1111	1803	943	1703	5560	1607	394	133	624
1922-23	101	99	100	97	99	97	92		
1923-24	23	30	27	26	27	24	26		
1924-25	111	107	97	85	99	80	82		
1925-26	54	62	64	68	63	65	56		
1926-27	123	114	115	118	117	123	123		
1927-28	86	84	78	68	79	60	52		
1928-29	46	55	52	52	52	53	57		
1929-30	66	64	54	52	59	54	55	-	53
1930-31	28	33	28	29	30	29	29	19	29
1931-32	122	117	118	121	119	130	132	104	112
1932-33	54	62	55	65	60	73	72	60	68
1933-34	39	45	38	41	41	41	33	15	37
1934-35	110	117	125	114	116	101	91	67	73
1935-36	119	120	123	110	117	117	124	129	120
1936-37	100	111	129	129	117	146	172	230	178
1937-38	184	190	220	216	202	204	221	267	206
1938-39	47	55	51	55	53	61	63	62	72
1939-40	126	123	116	112	119	111	130	159	111
1940-41	120	139	154	155	143	158	163	177	200
1941-42	134	132	136	133	133	125	125	102	120
1942-43	141	132	137	120	130	126	170	274	161
1943-44	61	73	73	70	69	73	80	77	93
1944-45	115	116	116	125	119	128	140	153	129
1945-46	106	105	100	102	104	100	90	71	104
1946-47	57	61	60	66	61	69	67	39	68
1947-48	80	78	73	71	76	62	66	48	53
1948-49	67	70	67	68	68	60	56	37	47
1949-50	97	86	76	77	84	80	76	47	70
1950-51	152	138	129	109	130	100	107	116	85
1951-52	172	170	166	179	173	178	209	241	223
1952-53	87	85	65	69	78	72	78	74	87
1953-54	80	80	71	75	77	81	78	67	81
1954-55	62	63	56	68	63	69	70	49	57
1955-56	169	183	179	179	177	158	184	157	140
1956-57	78	79	69	81	78	78	75	49	70
1957-58	151	147	150	155	150	153	162	168	169
1958-59	53	55	48	56	54	50	39	24	43
1959-60	54	59	51	49	53	44	46	36	45
1960-61	35	40	33	38	37	35	30	14	28
1961-62	89	98	98	113	101	115	103	66	106
1962-63	113	114	104	114	112	116	128	89	117

(a) Average unimpaired runoff in thousands of acre-feet computed from the 50-year period October 1907 through September 1957.

(b) Figures were computed from summations of unimpaired runoff at foothill stations on major tributaries only and do not include runoff from minor tributaries and from valley floor.

TABLE 5

MONTHLY UNIMPAIRED RUNOFF

(In percent of average)[a]

Month		Stanislaus River below Melones P. H.	Tuolumne River near La Grange	Merced River at Exchequer	San Joaquin River below Friant	San Joaquin River near Vernalis (b)	Kings River Inflow to Pine Flat	Kaweah River near Three Rivers	Tule River Inflow to Success	Kern River Inflow to Isabella
October	Percent (c)	135	112	89	88	105	87	87	112	93
	Average	8	15	7	20	50	19	4	1	14
November	Percent	36	24	21	38	31	43	34	24	63
	Average	23	39	18	28	108	26	8	4	18
December	Percent	35	31	16	19	26	18	15	14	42
	Average	47	78	40	58	223	48	17	9	26
January	Percent	63	62	68	113	76	120	152	76	98
	Average	68	108	60	74	310	63	22	13	27
February	Percent	245	249	222	226	237	241	316	146	303
	Average	84	135	79	92	390	80	28	20	33
March	Percent	88	64	61	74	71	70	71	36	85
	Average	122	180	99	136	537	115	40	27	49
April	Percent	100	92	88	79	89	79	96	109	76
	Average	206	286	149	244	885	219	63	24	88
May	Percent	130	120	109	108	116	106	122	114	90
	Average	294	447	245	430	1416	431	102	22	148
June	Percent	103	124	115	126	120	129	132	98	128
	Average	189	372	182	392	1135	389	77	10	126
July	Percent	118	153	141	163	152	166	176	177	175
	Average	53	115	50	163	381	155	24	2	58
August	Percent	116	171	126	154	148	150	164	297	171
	Average	12	19	10	46	87	44	6	1	24
September	Percent	200	127	48	159	145	136	186	300	187
	Average	5	9	4	20	38	19	3	0.3	14
1962-63 Water Year	Percent	113	114	104	114	112	116	128	89	117
	Average	1111	1803	943	1703	5560	1607	394	133	624

(a) Average unimpaired runoff in thousands of acre-feet computed from the 50-year period October 1907 through September 1957

(b) Figures were computed from summations of unimpaired runoff at foothill stations on major tributaries only and do not include runoff from minor tributaries and from the valley floor.

(c) Percent figures are preliminary figures supplied by Water Supply and Snow Surveys, Division of Operations.

Lakes and Reservoirs

There are 59 principal reservoirs in the State, of which 25 are located in the San Joaquin Valley area. These 25 have a total storage capacity of 4,727,520 acre-feet. The storage capacity, water in storage on October 1, 1962, and storage on October 1, 1963, in the major reservoirs in the San Joaquin Valley area are shown in Table 6. The quantity of water in storage in these 25 reservoirs at the end of the 1962-63 season was about 49 percent of the total storage capacity as compared to 36 percent at the end of the 1961-62 season.

TABLE 6

SUMMARY OF PRINCIPAL RESERVOIR STORAGE
IN THE SAN JOAQUIN VALLEY

(In acre-feet)

Watershed	Reservoir	Total Capacity	In Storage Oct. 1, 1962	In Storage Oct. 1, 1963
Stanislaus				
	Relief	15,560	5,788	4,400
	Strawberry	18,270	10,429	10,480
	Melones	112,600	11,360	11,060
	Donnels	64,500	48,276	49,576
	Beardsley	97,500	88,141	83,296
	Tulloch	68,400	16,648	33,948
Tuolumne				
	Lake Eleanor	26,100	17,976	18,520
	Lake Lloyd	268,000	183,058	182,450
	Hetch Hetchy	360,400	277,410	289,461
	Don Pedro	290,000	88,000	174,920
	Turlock Lake	49,000	7,950	11,440
Merced				
	Lake McClure	289,000	37,674	63,750
San Joaquin				
	Crane Valley	45,400	25,240	24,800
	Lake Thomas A. Edison	125,000	106,570	101,360
	Florence Lake	64,600	16,690	31,020
	Mammoth Pool	122,700	51,360	17,490
	Huntington Lake	89,800	86,660	87,900
	Redinger Lake	35,000	18,780	8,600
	Shaver Lake	135,400	79,640	103,830
	Millerton Lake	520,500	146,000	205,000
Kings				
	Wishon	128,300	45,200	90,060
	Pine Flat	1,001,500	247,400	467,200
Kaweah				
	Terminus	150,000	2,880	8,460
Tule				
	Success	80,000	7,100	12,350
Kern				
	Isabella	570,000	95,100	217,030
TOTAL		4,727,530	1,721,330	2,308,401

Streamflow Measurements

The records of many of the stream-gaging stations reported in Appendix B are maintained and operated by agencies cooperating with the Department of Water Resources. The methods used by all cooperating parties are standardized and the results obtained are equally good.

During the 1963 season 46 of the total of 80 gaging stations on streams for which records are reported herein were maintained, operated, rated, computed, and compiled by the Department of Water Resources.

Recorders

An automatic water stage recorder is in operation at each gaging station in the San Joaquin Valley area. The continuous record of water surface elevation at each station serves two major purposes in the preparation of the data in this report, and assists in the planning of flood control projects. First, the water surface elevation (gage height) is a factor in determining the quantity of flow of the stream in

second-feet passing a given station. Second, the actual surface elevation at two adjacent stations on a stream afford the means of obtaining the water surface elevation at pumping plants along the stream between the stations. This information assists in the determination of the pumping head in order that the rate of diversion by the pumping plants can be obtained.

Ratings

A streamflow rating is made for each stream-gaging station. This rating gives the flow in second-feet for each gage height at the station. Normally, the gage-height-flow relation or rating is more or less permanent where there is a fixed channel and a fixed flow regimen at the station. The rating varies, however, where the bed of the channel consists of loose, shifting sand, where heavy weed growth accumulates as the season progresses, or where there may be backwater effects due to ice or other downstream conditions. In these latter cases more frequent measurements of flow are made to obtain accurate records of flows passing the station.

Use of Water for Irrigation

The prevailing warm temperatures and a prolonged frost-free period during the summer season in the San Joaquin Valley favors the profitable production of a wide variety of marketable crops.

The major irrigated crops in the San Joaquin Valley include rice, alfalfa, orchard fruits, nuts, grapes, cotton, corn, grain, flax, pasture grasses, and a large variety of truck crops.

Criteria

The number of diversion points measured on the major streams in the San Joaquin Valley may vary from year to year. The criteria for selecting points to be measured were established in 1960. At that time it was determined that by measuring only those diversion points which had an average of two hundred acre-feet per season based on the previous three years of diversion record, 50 percent of the field work could be eliminated and still 95 percent of the total water diverted could be measured.

Changes in crop pattern and the available water supply are major factors that influence the amounts of water diverted for irrigation purposes.

Irrigation Diversions

Measurements and records of diversions in 1963 included all the major points of diversion on the valley floor along the San Joaquin River and tributaries; along the Stanislaus, Tuolumne, and Merced Rivers, and Dry Creek tributary to Tuolumne River; and along the Tule River.

This report contains records for a total of 170 points of diversion. Table 7 shows, by streams, the number of points of diversion and the acre-feet diverted.

TABLE 7

SUMMARY OF DIVERSION POINTS AND TOTAL ACRE-FEET DIVERTED

Oct. 1, 1962-Sept. 30, 1963

Stream	Number Of Points Measured	Total Acre-feet Diverted
San Joaquin River		
Vernalis to Fremont Ford Bridge	39	168,800
Fremont Ford Bridge to Gravelly Ford (a)	16	865,800
Gravelly Ford to Friant Dam	24	9,583
Tuolumne River	22	14,630
Stanislaus River	23	43,170
Merced River	34	56,750
Dry Creek (Tributary to the Tuolumne River)	3	1,368
Tule River	7	52,470
TOTAL	170	1,212,571

(a) Records furnished by U. S. Bureau of Reclamation.

Waters diverted by Central Valley Project canals and east side irrigation districts are shown on Table B-95.

The monthly amount of water diverted at the individual points of diversion along all the streams covered in the San Joaquin Valley area is shown along with the total acre-feet diverted for the season in Appendix B, Tables B-86 through B-93 of this report. The monthly use in percentage of seasonal total is also shown. The location of each diversion point on a given stream is measured from the mouth of that stream, progressing upward by river-mile. References to left or right bank assume an orientation facing downstream.

All of the diversions are accomplished by pumping except for 18 by gravity. The records of diversion by gravity are obtained by means of canal ratings established by flow measurements. The records of pumping diversions are obtained in a few instances by means of canal rating but, in the main, are obtained by actual measurement of the pump discharge. Most of the pumps are electrically operated, making it possible to establish a relationship between water pumped and power input. Sufficient measurements are made to establish a rate of discharge for each pump, and the electric meters are read monthly to determine the power used.

The monthly amount of diversions in acre-feet by the large east side irrigation districts from the Stanislaus, Tuolumne, and Merced Rivers during the 1963 season is shown in Appendix B, Table B-94. The monthly amount of diversions in acre-feet by the Friant-Kern and Madera Canals from Friant Reservoir on the San Joaquin River is shown in Appendix B, Table B-95.

Fresno Slough and James Bypass normally convey excess flood flows from the Kings River into the San Joaquin River at a point above Mendota Dam, but during the irrigation season, San Joaquin River water is backed up through those channels by the Mendota Dam to afford irrigation supplies to the James and Tranquillity Irrigation Districts and to certain other diverters. The diversion data for these streams shown in Table B-87 were furnished by the U. S. Bureau of Reclamation.

Imported Water

Water is imported to the San Joaquin Valley from the Sacramento-San Joaquin Delta via the Delta-Mendota Canal. The amount of water diverted and its distribution for use are shown in Table B-95.

CHAPTER IV

GROUND WATER MEASUREMENTS

Introduction

The ground water resources of California have long been recognized as one of the major natural resources of the State. The ever-increasing rate of draft on the ground water basins makes the problems associated with the use and conservation of this resource numerous and complex, and the solution more urgent.

More than one-quarter of all the ground water pumped for irrigation in the United States is used in the San Joaquin Valley. Widespread pumping began about 1900 and, especially since 1940, has increased at an accelerated rate. In response to this heavy withdrawal, ground water levels in extensive areas of the valley have declined rapidly. The water level decline will continue as long as ground-water pumpage exceeds the natural and artificial recharge of the ground water basin.

Ground water occurs under confined and unconfined conditions in the San Joaquin Valley. In much of the western, central, and southeastern parts of the valley, three distinct ground water reservoirs are present. In downward succession there are (1) a body of unconfined and semiconfined fresh water in alluvial deposits of recent, Pleistocene, and possibly later Pliocene age overlying the Corcoran Clay Member of the Tulare Formation; (2) a body of fresh water confined beneath the Corcoran Clay Member which occurs in alluvial and lacustrine deposits of late Pliocene age or older; and (3) a body of saline connate water contained in marine sediments of middle Pliocene or older age which underlies the freshwater body throughout the area. (U. S. Geological Survey Water-Supply Paper 1618 Abstract .)

In much of the eastern part of the valley, especially in the area of the major streams, the Corcoran clay member is not present and ground water occurs as one fresh-water body to considerable depth. Ground water is replenished by infiltration of rainfall, by infiltration from streams, canals, and ditches, by underflow entering the valley from tributary streams and from canyons, and by infiltration of excess irrigation waters.

The ground-water storage capacity of the San Joaquin Valley to a depth of 200 feet has been estimated to be approximately 93 million acre-feet, equal to roughly 9 times the capacity of the present and proposed surface-water reservoirs in the valley.

All studies of ground-water problems and plans for solution of these problems have two factors in common: they must be founded upon records of water level measurements and quality analysis of water samples obtained over a period of years.

The Department of Water Resources began the collection of ground-water level data in 1930 in connection with special investigation of water resources of specific areas, and has gradually developed a continuous program of basic water level data collection. Through cooperative activities of the federal and local agencies, coordinated and augmented by the department, the program of annual, semiannual, and monthly measurements of ground-water levels has gradually expanded.

Scope

The area covered by this report and its geographical relation to the Central Valley Drainage Basin are shown on Plate B-1.

The areal scope of Appendix C of this volume is depicted on Plates C-1 through C-6. During the period July 1, 1962, to June 30, 1963, the San Joaquin Valley Branch of the Department of Water Resources obtained approximately 13,000 water level measurements on some 7,500 wells. The period of record for many of these wells ranges from one to over 40 years.

Basic Data

Because significant trends in water level fluctuations can be indicated by a representative sample, a selection was made of approximately 600 wells for which the records are presented in Appendix C of this volume. These wells, designated as selected wells, were chosen on the basis of a number of factors such as

areal distribution; length of water level record; frequency of measurements; conformity with respect to water level fluctuation in the ground water area; and availability of a log, mineral analysis, and/or production record. Table C-1 presents the water level measurements made from July 1, 1962,through June 30, 1963. This volume continues the records for those wells published in Bulletin 77-62 which fall within the boundary of the San Joaquin Valley area.

Processed Data

Hydrographs depicting average water level fluctuations in 19 selected ground water areas are presented on Plate C-7. Individual well hydrographs depicting graphically the fluctuation of water levels are shown on Plate C-8. These wells distributed among significant areas were selected insofar as possible to be representative of their respective areas.

A ground-water map showing lines of equal elevation of water in wells for spring of 1963 appears on Plate C-9. Where sufficient data are available, lines of equal elevation of water are shown for the unconfined or semiconfined aquifer, and the confined aquifer or pressure surface.

Maps showing the areas where the ground-water level changed five feet or more in the unconfined, semiconfined, and confined aquifers are presented in Plates C-1 and C-2.

Related Information

For some basins or areas, maps showing depth to ground water are also prepared. At appropriate times, commonly every five years, maps are prepared showing lines of equal change occurring in the water level in wells during the time intervals. These maps are available in the office of the San Joaquin Valley Branch of the Department of Water Resources, and will be presented in future reports.

Cooperative Programs

The Department of Water Resources has cooperative ground water programs with the U. S. Geological Survey, U. S. Bureau of Reclamation, Kern County, Kings County Water District, and the Poso Soil Conservation District.

Monthly Program

Approximately 350 selected wells are measured monthly and the resulting figures are published in a monthly summary report. These wells were selected as being representative of their respective areas. Most of the field work is done by cooperating agencies, while the department measures 36 of the 350 selected wells. The department compiles and publishes the collected field data in a monthly report. The water level measurements on the selected monthly wells are included in Appendix C of this volume.

Annual and Semiannual Programs

In Kern County approximately 1000 wells are measured semiannually under a cooperative agreement between the U. S. Bureau of Reclamation, the Kern County Surveyors office, and the Department of Water Resources, with approximately 500 additional water level measurements being made by the Kern County Land Company and made available to the department.

Maps of Kern County showing lines of equal depth to water and lines of equal elevation of water in wells are prepared for both spring and fall of each year.

In the Kings County Water District approximately 325 selected wells are measured semiannually by that agency and submitted to the department for use in preparation of ground water maps under a cooperative agreement. Ground water maps are prepared for both spring and fall showing lines of equal elevation of water in wells in the district.

In the Poso Soil Conservation District approximately 40 wells are measured by that agency and submitted to the department. Ground water maps are prepared for the district showing depth to water in wells in January and July.

Ground Water Conditions

Data are presented in this report for two zones or aquifers in nine of the 46 areas reported in Appendix C.

During the period July 1962 to June 1963, 28 areas in the San Joaquin Valley showed a rise in the unconfined and semiconfined aquifers. There was no change in one area, but in 13 other areas there was a decline. Six of the eleven areas for which the pressure surface is reported show a decline and five show a rise in the water level.

In the shallow zone the maximum declines occurred in the Vandalia Irrigation District and the Shafter-Wasco Irrigation District, where changes of 10.9 feet and 9.1 feet respectively are noted. The greatest rise in the shallow zone was 11.2 feet in the Lindsay-Strathmore Irrigation District. The maximum decline of 23.6 feet occurred in the Mendota-Huron area deep zone. The greatest rise in the deep zone was 23.5 feet in the Corcoran Irrigation District. In those areas for which water levels are based on a composite of shallow and deep zones, the main change was a decline of 6.8 feet in the Buena-Vista Water Storage District.

Table 8 presents a summary of ground water level data collected in the San Joaquin Valley by basin or area.

TABLE 8

SUMMARY OF GROUND WATER LEVEL DATA
COLLECTED IN THE SAN JOAQUIN VALLEY
July 1, 1962 - June 30, 1963

Ground Water Basin or Area	Number	Measuring Agency	Number of Wells Measured		
			Monthly	Fall 1962	Spring 1963
San Joaquin Valley	5-22.00				
South San Joaquin Irrigation District	5-22.05	South San Joaquin Irrigation District		88	89
		San Joaquin County			2
Oakdale Irrigation District	5-22.06	Oakdale Irrigation District	6	136	136
Modesto Irrigation District	5-22.07	Modesto Irrigation District			173
Turlock Irrigation District	5-22.08	Turlock Irrigation District			200
Merced Irrigation District	5-22.09	Merced Irrigation District			226
El Nido Irrigation District	5-22.10	Merced Irrigation District			29
Delta-Mendota Area	5-22.11	U.S. Bureau of Reclamation		538	531
		Department of Water Resources		259	240
		San Luis Canal Company	112		
		San Joaquin County			6
		Panoche Water District		14	
Chowchilla Water District	5-22.12	Chowchilla Water District		137	137
		U.S. Bureau of Reclamation	8	18	24
Madera Irrigation District	5-22.13	Madera Irrigation District		214	210
		U.S. Bureau of Reclamation	13	36	40
		Chowchilla Water District		4	4
West Chowchilla-Madera Area	5-22.14	Chowchilla Water District		9	9
		U.S. Bureau of Reclamation	7	76	76
		Madera Irrigation District		25	25
Fresno Irrigation District	5-22.15	Fresno Irrigation District	9	119	111
		Consolidated Irrigation District		5	3
		U.S. Bureau of Reclamation	9	87	87
		Madera Irrigation District		1	1
		Department of Water Resources		41	43
City of Fresno	5-22.16	City of Fresno	2	62	66

TABLE 8 (Continued)

SUMMARY OF GROUND WATER LEVEL DATA
COLLECTED IN THE SAN JOAQUIN VALLEY
July 1, 1962 - June 30, 1963

Ground Water Basin or Area	Number	Measuring Agency	Number of Wells Measured		
			Monthly	Fall 1962	Spring 1963
San Joaquin Valley (continued)					
Fresno Slough Area	5-22.17	Fresno Irrigation District	1		
		Consolidated Irrigation District		3	4
		U.S. Bureau of Reclamation	10	207	207
		Department of Water Resources		50	50
		U.S. Geological Survey	3		
Consolidated Irrigation District	5-22.18	Consolidated Irrigation District	11	71	72
Alta Irrigation District	5-22.19	Alta Irrigation District	8	160	160
		U.S. Bureau of Reclamation	1	49	49
		Orange Cove Irrigation District		6	6
Lower Kings River Area	5-22.20	Kaweah Delta Water Conservation District		6	6
		Consolidated Irrigation District		6	7
		U.S. Bureau of Reclamation		17	17
		Department of Water Resources	7		155
Orange Cove Irrigation District	5-22.21	Orange Cove Irrigation District		113	114
		U.S. Bureau of Reclamation	4	31	30
Stone Corral Irrigation District	5-22.22	U.S. Bureau of Reclamation	2	31	31
Ivanhoe Irrigation District	5-22.23	Ivanhoe Irrigation District		42	42
		U.S. Bureau of Reclamation	2		
Kaweah Delta Water Conservation District	5-22.24	Kaweah Delta Water Conservation District		133	115
		Tulare Irrigation District		5	15
		Lindmore Irrigation District		7	7
		U.S. Bureau of Reclamation	12	14	32
		Department of Water Resources		79	86
Tulare Irrigation District	5-22.25	U.S. Bureau of Reclamation	5	10	14
		Tulare Irrigation District		105	96
Exeter Irrigation District	5-22.26	Exeter Irrigation District	1	78	78
		U.S. Bureau of Reclamation	2	3	3
Lindsay-Strathmore Irrigation District	5-22.27	Lindsay-Strathmore Irrigation District		21	21
		Lindmore Irrigation District		3	3
		U.S. Bureau of Reclamation	2		
Lindmore Irrigation District	5-22.28	Lindmore Irrigation District		170	170
		Porterville Irrigation District		4	4
		Exeter Irrigation District		2	2
		U.S. Bureau of Reclamation	4	17	18
Porterville Irrigation District	5-22.29	Porterville Irrigation District		22	22
		Lower Tule River Irrigation District		3	3
		U.S. Bureau of Reclamation	3	6	7
Lower Tule River Irrigation District	5-22.30	Lower Tule River Irrigation District		175	174
		Saucelito Irrigation District		5	2
		U.S. Bureau of Reclamation	5	13	17
Vandalia Irrigation District	5-22.31	Department of Water Resources			5
		U.S. Bureau of Reclamation	2		
Saucelito Irrigation District	5-22.32	Saucelito Irrigation District		45	48
		U.S. Bureau of Reclamation	4		
Pixley Irrigation District	5-22.33	Lower Tule River Irrigation District		1	2
		U.S. Geological Survey	3		
		U.S. Bureau of Reclamation	7	81	81
Alpaugh-Allensworth Area	5-22.34	U.S. Bureau of Reclamation	6	35	30
		Delano-Earlimart Irrigation District		63	52

TABLE 8 (Continued)

SUMMARY OF GROUND WATER LEVEL DATA
COLLECTED IN THE SAN JOAQUIN VALLEY
July 1, 1962 - June 30, 1963

Ground Water Basin or Area	Number	Measuring Agency	Number of Wells Measured		
			Monthly	Fall 1962	Spring 1963
San Joaquin Valley (continued)					
Delano-Earlimart Irrigation District	5-22.35	Delano-Earlimart Irrigation District		102	65
		U.S. Geological Survey	4		
		U.S. Bureau of Reclamation	1	53	53
Southern San Joaquin Municipal Utility District	5-22.36	Southern San Joaquin Municipal Utility District		65	65
		U.S. Geological Survey	6		
		Delano-Earlimart Irrigation District		4	4
		Kern County Land Company		8	8
		U.S. Bureau of Reclamation		7	8
North Kern Water Storage District	5-22.37	Kern County Land Company		182	182
		Department of Water Resources		12	
		U.S. Geological Survey	4		
Shafter-Wasco Irrigation District	5-22.38	Shafter-Wasco Irrigation District		74	74
		U.S. Bureau of Reclamation		6	6
		Kern County Land Company		30	30
		U.S. Geological Survey	3		
City of Bakersfield	5-22.39	California Water Service			32
Kern River Delta Area	5-22.40	Shafter-Wasco Irrigation District		6	6
		Kern County Surveyor		125	104
		Buena Vista Water Storage District	6		
		U.S. Bureau of Reclamation	11	77	77
		Kern County Land Company		201	201
Edison-Maricopa Area	5-22.41	Kern County Land Company		32	32
		U.S. Geological Survey	12		
		Kern County Surveyor		36	33
		U.S. Bureau of Reclamation		195	206
		Department of Water Resources		105	94
Buena Vista Water Storage District	5-22.42	Buena Vista Water Storage District	28		
		Kern County Land Company		6	6
		U.S. Geological Survey	6		
		Kern County Surveyor		23	18
Semitropic Water Storage District	5-22.43	U.S. Bureau of Reclamation		56	56
		Kern County Surveyor		117	99
		U.S. Geological Survey	11		
		Kern County Land Company		25	25
		Buena Vista Water Storage District	4		
Avenal-McKittrick Area	5-22.44	U.S. Geological Survey	2		
		Department of Water Resources			189
Tulare Lake-Lost Hills Area	5-22.45	Kern County Surveyor			12
		Department of Water Resources			190
		U.S. Geological Survey	4		
Corcoran Irrigation District	5-22.46	Kaweah Delta Water Conservation District		1	1
		Department of Water Resources	3		
Mendota-Huron Area	5-22.47	U.S. Geological Survey	14		
		U.S. Bureau of Reclamation		44	48
		Department of Water Resources			650
Poso Soil Conservation District	5-22.48	Poso Soil Conservation District	25		
		San Luis Canal Company	11		
Terra Bella Irrigation District	5-22.50	U.S. Bureau of Reclamation	3	33	25

Table 9 presents the average change in ground water levels, spring 1962 to spring 1963, and the wells showing the maximum and minimum depth to ground water in the spring of 1963, for each basin or area.

The average change in water level for each basin or area was determined where possible by planimetering ground water contour maps. In areas where insufficient data were available to define reliable contours, a numerical average was made from the actual well measurements.

TABLE 9

AVERAGE CHANGE IN GROUND WATER LEVELS IN
BASINS AND AREAS IN THE SAN JOAQUIN VALLEY
Spring 1962 - Spring 1963

Ground Water Basin or Area		Number of Wells Considered in Analysis	Average Change in Ground Water Level 1962 to 1963 (In feet)	Location and Recorded Maximum and Minimum Depth to Water in the spring of 1963 (In feet)	
Name	Number			Maximum	Minimum
San Joaquin Valley	5-22.00				
South San Joaquin Irrigation District	5-22.05	1/	-0.3	02S/08E-01M01 28.7	01S/07E-21R01 5.9
Oakdale Irrigation District	5-22.06	1/	+3.2	02S/11E-28J01 143.8	02S/10E-10E01 6.6
Modesto Irrigation District	5-22.07	1/	-0.5	03S/10E-32G01 56.6	03S/07E-36C01 5.2
Turlock Irrigation District	5-22.08	158	+2.0	06S/10E-26N01 14.9	05S/09E-07N01 2.8
Merced Irrigation District	5-22.09	1/	+0.6	07S/13E-04D01 23.1	08S/13E-03N01 2.1
El Nido Irrigation District	5-22.10	1/	+0.9	09S/13E-23H01 87.1	09S/14E-21C01 63.7
Delta-Mendota Area	5-22.11	457	-1.2	12S/11E-36Q01 396.5	08S/10E-31C01 0.1
Chowchilla Water District	5-22.12	1/	+3.9	09S/16E-27A01 87.0	09S/16E-33E01 38.5
Madera Irrigation District	5-22.13	1/	+1.5	12S/18E-05C01 85.7	13S/17E-07J03 29.0
West Chowchilla-Madera Area	5-22.14	1/	-1.5	10S/14E-08B01 77.2	10S/13E-35K01 5.2
Fresno Irrigation District	5-22.15	1/	+0.9	12S/21E-19D01 94.9	14S/23E-04G01 12.6
City of Fresno	5-22.16	1/	+0.3	14S/20E-02B01 85.6	14S/20E-15M01 61.4
Fresno Slough Area	5-22.17	1/	-5.0	15S/16E-29P01 196.0	14S/16E-28N01 11.0
Consolidated Irrigation District	5-22.18	1/	+0.5	16S/19E-14A01 74.7	17S/22E-01C01 19.8
Alta Irrigation District	5-22.19	1/	+5.4	14S/23E-25N01 69.5	14S/23E-02E01 10.1
Lower Kings River Area	5-22.20	1/	+1.6	20S/21E-04M01 172.1	19S/19E-25A01 4.5
Orange Cove Irrigation District	5-22.21	1/	+6.5	15S/24E-26J01 75.2	14S/24E-27P01 2.0
Stone Corral Irrigation District	5-22.22	1/	+9.4	17S/25E-12D01 49.2	16S/26E-32R01 0.8
Ivanhoe Irrigation District	5-22.23	1/	+1.9	17S/25E-26C01 89.3	17S/26E-21D02 26.1
Kaweah-Delta Water Conservation District	5-22.24	1/	+3.2	20S/22E-10C01 121.2	18S/26E-14D01 5.5
Tulare Irrigation District	5-22.25	1/	+5.4	20S/23E-18C01 120.9	19S/25E-17J01 59.2

TABLE 9 (Continued)

AVERAGE CHANGE IN GROUND WATER LEVELS IN
BASINS AND AREAS IN THE SAN JOAQUIN VALLEY
Spring 1962 - Spring 1963

Ground Water Basin or Area		Number of Wells Considered in Analysis	Average Change in Ground Water Level 1962 to 1963 (In feet)	Location and Recorded Maximum and Minimum Depth to Water in the Spring of 1963 (In feet)	
Name	Number			Maximum	Minimum
San Joaquin Valley (continued)					
Exeter Irrigation District	5-22.26	1/	+9.9	19S/26E-13R01 106.0	18S/26E-24B01 20.9
Lindsay-Strathmore Irrigation District	5-22.27	1/	+11.2	19S/26E-36F01 93.9	20S/27E-15R01 3.1
Lindmore Irrigation District	5-22.28	1/	+8.6	20S/26E-28R02 126.0	21S/27E-03K01 39.0
Porterville Irrigation District	5-22.29	1/	+5.4	21S/27E-29H01 87.4	21S/27E-34J01 16.2
Lower Tule River Irrigation District	5-22.30	1/	+2.4	22S/24E-14R01 160.0	21S/26E-09N02 27.0
Vandalia Irrigation District	5-22.31	8	-10.9	22S/27E-13C01 158.9	22S/28E-18A01 120.2
Saucelito Irrigation District	5-22.32				
Unconfined Aquifer		1/	+8.3	22S/26E-13R01 146.7	22S/26E-09B01 116.0
Pressure Surface		1/	+10.6	22S/26E-32E01 201.5	22S/26E-05P01 126.1
Pixley Irrigation District	5-22.33				
Unconfined Aquifer		1/	-2.8	22S/25E-19A04 136.7	23S/24E-16J01 57.9
Pressure Surface		1/	-6.7	22S/25E-36H01 211.2	23S/24E-29H01 105.1
Alpaugh-Allensworth Area	5-22.34				
Unconfined Aquifer		1/	-4.5	24S/25E-17P01 130.0	24S/23E-21B02 47.2
Pressure Surface		1/	+3.0	24S/24E-20R01 193.0	24S/23E-22A01 117.0
Delano-Earlimart Irrigation District	5-22.35				
Unconfined Aquifer		1/	-2.5	24S/26E-29R02 161.0	24S/25E-25P01 65.0
Pressure Surface		1/	+3.9	24S/26E-25H01 349.0	24S/25E-22R01 125.0
Southern San Joaquin Municipal Utility District	5-22.36				
Unconfined Aquifer		1/	+8.3	25S/26E-28H02 204.4	25S/24E-12D02 64.0
Pressure Surface		1/	+5.1	25S/26E-23Q01 350.0	25S/26E-18M01 134.8
North Kern Water Storage District	5-22.37				
Unconfined Aquifer		1/	+0.7	28S/26E-16L01 214.0	26S/25E-28A01 78.0
Pressure Surface		1/	-15.2	27S/26E-20D01 302.0	26S/25E-09P01 157.8
Shafter-Wasco Irrigation District	5-22.38				
Unconfined Aquifer		1/	-9.1	27S/25E-06N02 190.5	28S/26E-31J01 131.5
Pressure Surface		1/	-14.8	27S/25E-20A01 210.5	26S/24E-33R01 171.5

TABLE 9 (Continued)

AVERAGE CHANGE IN GROUND WATER LEVELS IN
BASINS AND AREAS IN THE SAN JOAQUIN VALLEY
Spring 1962 - Spring 1963

Ground Water Basin of Area		Number of Wells Considered in Analysis	Average Change in Ground Water Level 1962 to 1963 (In feet)	Location and Recorded Maximum and Minimum Depth to Water in the Spring of 1963 (In feet)	
Name	Number			Maximum	Minimum
San Joaquin Valley (continued)					
City of Bakersfield	5-22.39	27	-11.2	29S/28E-17R01 300.0	29S/28E-19D01 95.0
Kern River Delta Area	5-22.40	1/	-3.7	28S/24E-23D03 171.2	31S/28E-29B01 12.0
Edison-Maricopa Area	5-22.41				
Pressure Surface		1/	-11.4	11N/20W-14B01 571.0	32S/25E-20G01 101.5
Buena Vista Water Storage District	5-22.42	1/	-6.8	27S/22E-08R01 112.5	30S/23E-01C01 28.7
Semitropic Water Storage District	5-22.43				
Unconfined Aquifer		1/	+0.6	25S/24E-08H01 147.0	28S/23E-03R01 29.0
Pressure Surface		1/	-1.0	27S/23E-08G01 217.5	25S/23E-07A01 103.0
Avenal-McKittrick Area	5-22.44	46	+0.9	26S/18E-16E01 244.2	24S/20E-14C01 15.9
Tulare Lake-Lost Hills Area	5-22.45	21	+1.3	21S/20E-09M01 246.1	24S/20E-14C01 15.9
Corcoran Irrigation District	5-22.46				
Unconfined Aquifer		1/	+8.9	21S/22E-02H01 95.4	21S/22E-08M01 13.0
Pressure Surface		1/	+23.5	21S/21E-13A01 187.9	20S/22E-20A01 96.6
Mendota-Huron Area	5-22.47				
Pressure Surface		1/	-23.6 2/	17S/15E-30M01 805.4	15S/16E-23P01 105.9
Poso Soil Conservation District	5-22.48	1/	-1.2	12S/14E-08P01 13.0	11S/12E-22N01 1.8
San Luis Canal Company	5-22.49	1/	+0.6	10S/12E-08A01 15.2	10S/11E-16R01 1.0
Terra Bella Irrigation District	5-22.50	5	0.0	23S/27E-10H01 229.5	23S/27E-01A01 75.6

1/ Averages were determined by planimetering ground water contour maps.

2/ Change determined from water level measurements made March 1962 and December 1962.

Table 10 presents the change in average ground water levels from 1921 to 1951 and 1951 to 1963 in nineteen historic ground water areas in the San Joaquin Valley.

TABLE 10

CHANGE IN AVERAGE GROUND WATER LEVEL FROM
1921 to 1951 and 1951 to 1963
IN NINETEEN GROUND WATER AREAS IN THE SAN JOAQUIN VALLEY

Name of Ground Water Area	Area in Square Miles	Irrigation and Other Water Districts Included in the Ground Water Area	Net Change in Water Level 1921-51 1/ (In feet)	Net Change in Water Level 1951-63 2/ (In feet)
Madera	342.6	Madera Irrigation District, Chowchilla Water District	-24.1 3/	-14.5
Fresno	404.0	Fresno Irrigation District	-22.4	-16.9
Consolidated	243.0	Consolidated Irrigation District	-19.0	-10.5
Fresno, Consolidated and Outside	700.1	Fresno Irrigation District, Consolidated Irrigation District	-23.2	-15.1
Outside Only	53.1	-----	-25.6	-28.6
Centerville Bottoms	18.1	-----	+ 1.0	+ 3.0
Alta	190.9	Alta Irrigation District	-17.2 3/	- 5.1
Ivanhoe	17.4	Ivanhoe Irrigation District	-55.9	+10.3
Outside Ivanhoe	76.6	Part of Alta Irrigation District, Stone Corral Irrigation District	-28.5	- 3.0
Mill Creek	128.2	-----	-31.1	-16.4
Tulare	121.1	Tulare Irrigation District	-59.1	- 7.3
Elk Bayou	67.6	-----	-47.8	-15.1
Lindsay-Exeter	136.4	Exeter Irrigation District, Lindsay-Strathmore Irrigation District, Lindmore Irrigation District	-77.7	+48.3
Tule River	156.6	Porterville Irrigation District, most of Lower Tule River Irrigation District, part of Saucelito Irrigation District	-62.5	+15.0
Lower Deer Creek	162.2	Part of Lower Tule River Irrigation District, most of Saucelito Irrigation District, part of Delano-Earlimart Irrigation District	-106.7	- 9.9 4/ -10.8 5/
Middle Deer Creek	54.6	Terra Bella Irrigation District	-61.8	-13.2 4/ -37.5 5/
Delano-Earlimart	140.0	Most of Delano-Earlimart Irrigation District, small part of South San Joaquin Municipal Utility District	-133.8	+ 1.4 4/ - 7.8 5/
McFarland-Shafter	306.0	Southern San Joaquin Municipal Utility District, North Kern Water Storage District, Shafter-Wasco Irrigation District	-99.0	- 4.0 4/ -21.4 5/
Rosedale	78.9	-----	-36.3	-60.4
Arvin-Edison	205.2	Arvin-Edison Water Storage District	-69.9 6/	-19.0 5/

1/ 1951 was the first year of substantial deliveries from the Friant-Kern Canal.
2/ Fall of 1951 to spring of 1963.
3/ Fall of 1929 to fall of 1951.
4/ Spring 1961 to spring 1963, unconfined aquifer.
5/ Spring 1961 to spring 1963, confined aquifer; only one aquifer reported prior to 1961.
6/ Fall 1941 to fall 1951.

CHAPTER V

SURFACE WATER QUALITY

Introduction

The Department of Water Resources maintains a program of surveillance of the quality of water to detect any degradation of the surface waters of California due to contributions of wastes by agricultural, industrial, and municipal water users and to notify the proper control agencies of any such occurrences. The Surface Water Quality Monitoring Program was initiated to meet this surveillance need in April 1951 with the following objectives: (1) to determine the quality of the State's surface waters through a network of strategically located sampling stations representative of the major surface streams and lakes; (2) to detect changes in the quality of surface waters and notify control agencies of adverse changes; (3) to determine trends in surface water quality; and (4) to compile data into readily available form for distribution to cooperators and interested agencies.

Scope

The areal extent of activities discussed in this chapter and in Appendix D is shown on Plate D-1. Data on the quality of surface waters are presented in graphs and tables in Appendix D for the 1963 water year (October 1, 1962, to September 30, 1963). These data represent the observed physical, chemical, bacteriological, and radiological characteristics of water collected at the surface water quality stations shown also on Plate D-1. The stations are listed alphabetically in Table D-1 and are listed in Table 11 by river units within the valley's two drainage basins, the San Joaquin River Basin and the Tulare Lake Basin.

Sampling Program

The Department of Water Resources has 29 surface water quality monitoring stations in the San Joaquin Valley area. Of these, 19 are sampled monthly, eight quarterly, and the remaining two semiannually. The variation in the sampling frequency is dependent upon past records, need, and the type of data required.

The U. S. Army Corps of Engineers and the City and County of San Francisco (Oakdale office) cooperate by the collection of samples obtained at nine and five stations, respectively.

Station Sampling

Sampling at each station consists of obtaining water samples for partial mineral and bacteriological analyses and field data including pH, temperature, gage height, and dissolved oxygen determination. The samples collected in May and September are subject to: (1) complete mineral analysis, (2) bacteriological analysis, (3) radiological analysis, and (4) determination of concentrations of phosphate, arsenic, and detergents (alkyl benzene sulfonate-ABS). A heavy metal sample is collected twice a year at ten selected stations for spectrographic analysis. The results of the spectrographic analyses for the ten stations are contained in Table D-32.

Conductivity Recorders

Conductivity recorders are installed at selected surface water stations to obtain continuous records of the specific electrical conductance of the waters. The recorder charts are removed, edited, and processed at the end of each month. The data are converted and tabulated into mean hourly and weekly electrical conductivity values. A plot of the mean weekly values versus time for each of these stations is shown on Plate D-2.

Information from these recorders is used to approximate concentrations of several water quality parameters, including concentrations of total dissolved solids (TDS), chlorides, sulfates, and total hardness. These approximations are possible because of the relationship between specific conductance and each of the above parameters.

TABLE 11

SURFACE WATER QUALITY MONITORING STATIONS BY DRAINAGE BASINS

	Station number
SAN JOAQUIN RIVER BASIN	
San Joaquin River Unit	
San Joaquin River near Vernalis	27
San Joaquin River at Maze Road Bridge	26a
San Joaquin River near Grayson	26
San Joaquin River at Patterson Bridge	27a
San Joaquin River at Crows Landing Bridge	26b
San Joaquin River at Hills Ferry Bridge	25b
San Joaquin River at Fremont Ford Bridge	25c
San Joaquin River near Mendota	25
San Joaquin River at Friant Dam	24
Salt Slough at San Luis Ranch (near Los Banos)	24c
Delta-Mendota Canal	
Delta-Mendota Canal near Tracy	93
Delta-Mendota Canal near Mendota	92
Stanislaus River Unit	
Stanislaus River near Mouth	29
Stanislaus River below Tulloch Dam	29a
Tuolumne River Unit	
Tuolumne River at Tuolumne City	31
Tuolumne River at Hickman-Waterford Bridge	30
Tuolumne River below Don Pedro Dam	31a
Merced River Unit	
Merced River near Stevinson	32
Merced River below Exchequer Dam	32a
Chowchilla River Unit	
Chowchilla River near Raymond	113
Fresno River Unit	
Fresno River near Daulton	114
TULARE LAKE BASIN	
Kings River Unit	
Kings River below Peoples Weir	34
Kings River below Pine Flat Dam	33b
Kings River below North Fork	33c
Big Creek above Pine Flat Dam	33d
Kaweah River Unit	
Kaweah River below Terminus Dam	35
Tule River Unit	
Tule River below Success Dam	91
Kern River Unit	
Kern River near Bakersfield	36
Kern River below Isabella Dam	36a
Kern River near Kernville	36b

CHAPTER VI

GROUND WATER QUALITY

Introduction

Water development to meet the needs of California's phenomenal growth is one of the major problems facing the State. Although the use of ground water has been, and is, one of the major factors contributing to the economy of the State, insufficient data are available regarding the mineral quality of such ground water supplies. The present widespread dependence upon ground water requires constant vigilance, coupled with remedial action where necessary, to assure that the quality of ground water remains suitable for all intended uses. In view of this need, a statewide program of observation and study of ground water quality was initiated by the Department of Water Resources in 1953.

Scope

The areal scope of the activities discussed in this chapter and in Appendix E of this volume is shown on Plate E-1. Approximately 415 wells were sampled throughout the San Joaquin Valley, Panoche Valley, Tehachapi Valley and Cummings Valley. Panoche Valley was added to the monitoring program in 1960 as part of the continuing study of ground water basins of California. Tehachapi and Cummings Valleys were added in 1963 subsequent to a report by the Department of Water Resources on "A Water Supply for the Tehachapi Institution for Men," August 1961, which established the need for ground water quality data in the area. The location of the monitored wells for 1963 are shown on Plate C-3, "Location of Selected Wells."

Ground Water Quality Conditions

Adequate monitoring of the quality of a ground water basin requires the establishment of norms from which deviations can be determined. Considerable information has been gathered during the early years of this program and through other programs where ground water quality data were collected to assist in establishing the norms. Individual wells for the monitoring program were selected by an evaluation of well drillers' logs, water analyses, and water level data to best represent the quality of the ground water in the surrounding area. The number of wells needed to satisfy this objective was mainly determined by the complexity of the ground water basin in a given area. The analyses of samples collected from selected wells in the San Joaquin Valley for the 1963 water year are contained in this report. Included are tables of complete and partial mineral analyses, heavy metal and radiological determinations. The type of analysis made on a sample from a well is based mainly on the history of the data on that well.

Data collected during the 1963 water year were used to determine the quality of the main body of ground water in the San Joaquin Valley area. Plates E-2 and E-3 show the areal distribution of ground water quality characteristics in the San Joaquin Valley area. Plate E-2, "Lines of Equal Electrical Conductivity in Ground Water," depicts the variation in the concentration of dissolved minerals in ground water, as measured by electrical conductivity. Plate E-3, "Mineral Types of Ground Water," shows the areal variation of the chemical character of ground water in the San Joaquin Valley. The chemical character classification is determined by the predominant cation and anion. Wells that deviate from the norm for the reporting period are listed on Table 12.

Samples of various wells throughout the valley, especially on the west side, indicate increasing electrical conductivity (EC). This could be caused by many factors: pollution by highly mineralized waste discharges, heavy pumping in the deep zones causing connate waters to be drawn up, and/or heavy pumping in the shallow zones causing a drawdown of percolating irrigation and drainage waters containing high salts. On the other hand, importation of good quality water often reduces the concentration of salts by dilution in shallow aquifers and by reduction of ground water withdrawal.

High concentrations of nitrates occur in various places throughout the valley, both naturally and as a result of pollution. Pollution abatement in this regard is important; however, the differentiation between natural nitrates and nitrates resulting from pollution is difficult. Lithium, a relatively rare constituent of ground water, usually appears in very small quantities. In concentrations greater than

Table 12

WELLS INDICATING SIGNIFICANT DEVIATION IN QUALITY FROM SURROUNDING AREA

WELL NUMBER USE	DEVIATION	STATUS
	Merced Irrigation District	
7S/15E - 30E1-M Irrigation	EC[1] = 676 Area EC = 300-400	Investigation underway
	Delta Mendota Area	
9S/9E - 2L1-M Irrigation & stock	EC increasing from 964 in 1961 to 2050 in 1963	Investigation underway
	Madera Irrigation District	
13S/17E - 5P1-M Irrigation	Radioactivity[2] = 61.6 ± 5.6[3]	Investigation underway
	Fresno Irrigation District	
13S/17E - 22B1-M Irrigation	NO_3[4] = 25 ppm[5] Area NO_3 = < 10.0 ppm	Current investigation on this area underway
13S/19E - 24Q1-M Irrigation	1955 EC = 2763 1963 EC = 990	This well was previously polluted and was included in an investigation on the pollutant in 1955. The subsequent pollution abatement is the reason for EC reduction
13S/19E - 32M1-M Domestic	EC increasing from 486 in 1952 to 832 in 1963	Current investigation on this area underway
	Fresno Slough Area	
16S/17E - 10G-M Irrigation	Radioactivity = 68.5 ± 5.8	Possible result of radioactive waste discharge - Investigation underway

1 - EC = Electrical Conductivity in micromhos
2 - Radioactivity in picocuries per liter
3 - ± X is statistical deviation (0.9 confidence level)
4 - NO_3 = Nitrates
5 - ppm = parts per million
6 - value not exact due to interference in determination
7 - ABS = Alkyl-Benzene-Sulfonate (Detergents)

Table 12

WELLS INDICATING SIGNIFICANT DEVIATION IN QUALITY FROM SURROUNDING AREA

WELL NUMBER USE	DEVIATION	STATUS
	Alta Irrigation District	
17S/23E - 8H1-M Domestic	NO_3 = 40 ppm Area NO_3 = < 10 ppm	Current investigation on this area underway
	Lower Kings River Area	
20S/21E - 12A1-M Domestic	EC increasing steadily from 826 in 1958 to 1400 in 1963	Investigation underway
	Edison-Maricopa Area	
32S/29E - 35M2-M Irrigation	NO_3 = 159 ppm Area NO_3 = < 10 ppm	Investigation of this area to be conducted during 1964-65
	Semitropic Water Storage District	
28S/23E - 25P1M Irrigation	EC increasing steadily from 267 in 1956 to 537 in 1963	Investigation underway
	Avenal-McKittrick Area	
26S/18E - 1A-M Irrigation	Lithium[6] = < 3.8 ppm	Resampling to determine a more exact value
	Tulare Lake-Lost Hills Area	
23S/21E - 18D1-M Artesian - Irrigation	Total analysis high EC = 11,700	Previous investigation on this well. Presently monitored as a result of that study.
24S/22E - 35N1-M Irrigation & stock	Arsenic = 0.25 ppm Copper = 1.00 ppm	Investigation underway

1 - EC = Electrical Conductivity in micromhos
2 - Radioactivity in picocuries per liter
3 - $\pm$ X is statistical deviation (0.9 confidence level)
4 - NO_3 = Nitrates
5 - ppm = parts per million
6 - value not exact due to interference in determination
7 - ABS = Alkyl-Benzene-Sulfonate (Detergents)

Table 12

WELLS INDICATING SIGNIFICANT DEVIATION IN QUALITY FROM SURROUNDING AREA

WELL NUMBER USE	DEVIATION	STATUS
	Mendota Huron Area	
13S/14E - 34M1-M Domestic & irrigation	EC decreasing steadily from 5350 in 1951 to 4670 in 1963	Investigation underway
	Stanislaus Plains	
3S/12E - 26P1-M	EC = 4300 Area EC = 200 to 300	Natural gas well - previous investigation on local gas wells resulted with this well being monitored
	North Tulare Plains	
18S/26E - 10N1-M Irrigation	NO_3 = 78 ppm Area NO_3 =< 10 ppm	Investigation underway
	South Tulare Plains	
21S/27E - 27F1-M	ABS[7] = 0.44 ppm	Investigation underway
	Kern Plains	
26S/27E - 9G1-M	Lithium = 0.2 ppm	Investigation undersay

1 - EC = Electrical Conductivity in micromhos
2 - Radioactivity in picocuries per liter
3 - ± X is statistical deviation (0.9 confidence level)
4 - NO_3 = Nitrates
5 - ppm = parts per million
6 - value not exact due to interference in determination
7 - ABS = Alkyl-Benzene-Sulfonate (Detergents)

0.1 part per million, however, lithium has been found to be detrimental to citrus and other fruit trees in much the same manner as boron. Arsenic and copper, although generally rare, also are found in some ground waters of the valley and can be significant in small concentrations.

Detergents (ABS: alkyl benzene sulfonate) have been determined to be an indicator of pollution and therefore should not occur in ground water. For this reason ABS determinations are made on samples from wells in the vicinity of sewage or industrial waste discharges. Although no critical values of radioactivity have been reached in the valley, certain wells have had higher than normal values. These could be naturally occurring conditions or pollution from radioactive sources.

Sampling Program

Samples from the monitored areas are collected from early spring, when pumping begins, through the fall, when pumping generally slows down. Most of the samples collected are obtained by cooperating agencies, the remainder being obtained by the department. Table 13 lists the agency, the corresponding area, and the number of wells sampled by that agency.

TABLE 13

COOPERATING AGENCIES
GROUND WATER QUALITY MONITORING PROGRAM
SAN JOAQUIN VALLEY AREA

Agency	Area	No. of Samples
Stanislaus County Farm Advisor	Stanislaus County	15
Turlock Irrigation District	Turlock Irrigation District	21
Merced Irrigation District	Merced Irrigation District	15
Central California Irrigation District	Central California Irrigation District	27
Fresno Irrigation District	Fresno Irrigation District	6
Kings County Farm Advisor	Kings County	28
Tulare County Farm Advisor	Tulare County	23
Kern County Farm Advisor	Kern County	60
Buena Vista Water Storage District	Buena Vista Water Storage District	10
U. S. Geological Survey	Portions of Fresno and Kings Counties	59

APPENDIX A

CLIMATE

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LIST OF TABLES

LIST OF PLATES

(Bound at end of volume)

INTRODUCTION

This appendix presents the climatological data for the period July 1, 1962, to June 30, 1963. The data consists of precipitation station descriptions, monthly precipitation quantities, monthly temperature summaries and monthly evaporation totals.

EXPLANATION OF TABLES

Precipitation Station Index

Table A-1 shows the precipitation station index. The climatological station designations used are based on the drainage basin and alpha number. Stations are also named and latitude and longitude are shown to the nearest minute. The county, elevation above sea level, the year the record began and the name of the current observer of record is also shown.

Each main drainage basin is assigned a letter and each subbasin a number as shown on Plate A-1 of this report.

The alpha order number is assigned each station to denote its order in alphabetical sequence for machine processing. The subnumbers are used to avoid duplication of the original four-digit system for machine processing. Only 21 columns are available for the station name making some abbreviations necessary.

Each station is generally named after and referenced to the nearest post office (Livingston 5W - a point 5 miles west of the post office in the town of Livingston), or named for a geographic location (Chiquito Creek). Occasionally the observer's name is incorporated in the station name (Hornitos Giles Ranch).

Monthly Precipitation

Table A-2 shows the monthly and seasonal total rainfall for some 395 weather stations within and near the San Joaquin Valley area. This table summarizes all of the available precipitation observations from July 1962 through June 1963. Daily records are available in department office files.

Monthly Temperatures

Table A-3 shows a temperature summary for a monthly period at 60 weather stations throughout the San Joaquin Valley area.

The individual observations were obtained using the observations, techniques, types of thermometers, and exposure conditions recommended by the U. S. Weather Bureau. The Fahrenheit scale is used in all references to temperature.

Terms used in connection with the temperature data are explained in the following:

Term	Definition	Abbreviation
Maximum	The highest temperature of record for the month	Max.
Minimum	The lowest temperature of record for the month.	Min.
Average maximum	The arithmetic average of daily maximum temperatures for indicated period.	Avg. max.
Average minimum	The arithmetic average of daily minimum temperatures for indicated period.	Avg. min.
Average temperature	The average of the daily maximum and minimum for each day; the daily averages are averaged to make the monthly averages.	Avg.

Monthly Summary of Evaporation Station Data

Table A-4 shows the monthly net evaporation at 12 stations throughout the San Joaquin Valley area.

Observations of the amount of water evaporating from an open pan are made in the manner recommended by the U. S. Weather Bureau. The standard Weather Bureau pan is 47.5 inches in diameter and

10 inches deep. It contains clean water to a depth of 7 to 8 inches. The pan is placed on a lumber frame to insulate it from significant conductive heat exchange with the ground. The evaporation is measured by the actual difference in the pan water surface elevation over a 24-hour period with the appropriate adjustments for rainfall.

Terms used in connection with evaporation data are explained below:

Term	Definition	Abbreviation
Evaporation	The net amount of water evaporated from the pan for the period given.	Evap.
Precipitation	The total amount of rainfall in inches which occurred during the period.	Precip.
Wind	The total movement of air over the pan, in miles, for the period.	Wind
Average maximum	See explanation in temperature data table.	
Average minimum	See explanation in temperature data table.	

Reference Notes

A list of the reference notes used in the climatological portion of this report follows:

CD	Record published in "Climatological Data" by U. S. Weather Bureau.
WB	All or part of record published by U. S. Weather Bureau.
HPD	Record published in "Hourly Precipitation Data" by U. S. Weather Bureau.
HPD CD	Published in both "CD" and "HPD" from separate gages. Record from "CD" reproduced in this report.
CD(P)	Precipitation data published in "CD". Other data published by DWR.
R CD	Published in both "CD" and "HPD" from recording rain gage. Record from "CD" reproduced in this report.
R	Recording rain gage. Hourly precipitation distribution not necessarily available at DWR.
(R)	Hourly precipitation record also available for this station.
S	Storage gage. Data published in "Storage Gage Precipitation Data" by U. S. Weather Bureau.
Ss	Storage gage using standard rain gage. Data published by DWR.
T	Trace.
AS	After storm only. Small amounts may not be recorded.
b	Preliminary data - subject to revision.
E	Wholly or partially estimated.
-	No record.
M	All or part of record missing.
RB	Beginning of record.
RE	End of record.
*	Amount included in following measurement; time distribution unknown.
V	Includes total for previous month.
D	Water equivalent of snowfall wholly or partly estimated using a ratio of 1 inch water equivalent to every 10 inches of new snowfall.
SCE	Data obtained from Southern California Edison Company.

Additional criteria are:

Dimensional units used in this report are: Temperature in degrees Fahrenheit, precipitation and evaporation in inches, and wind movement in miles (per month).

Evaporation, wind movement and temperature data in this report are not published by the U. S. Weather Bureau.

All temperature data represent air temperatures.

TABLE A-1

PRECIPITATION STATION INDEX

Drainage Basin	Alpha Order Number	Station Name		County	Elev.	Lat. Deg.	Lat. Min.	Long. Deg.	Long. Min.	Record Began	Observer
C0	0009	Academy		Fresno	545	36	53	119	32	1958	Edwin W. Simpson
B6	0049	Ahwahnee 2 NNW		Madera	2790	37	24	119	44	1959	Mrs. Eleanor P. Crooks
C0	0204	Angiola	WB	Tulare	205	35	59	119	29	1899	Angiola Elev. & Whse.
C7	0215	Annette		Kern	2140	35	39	120	10	1951	Ernest Still
D6	0239	Apache Camp	WB	Ventura	4965	34	52	119	20	1940	Kern Co. Road Camp
C7	0314	Arroyo Hondo		Fresno	1650	36	26	120	34	1951	Closed June 30, 1962
C7	0315	Arroyo Leona		Fresno	1480	36	24	120	32	1947	Closed June 30, 1962
C0	0332	Arvin		Kern	445	35	12	118	49	1936	Kern Co. Fstry. & F.D.
C0	0332-02	Arvin-Frick		Kern	437	35	14	118	52	1959	Dept. Water Resources
C2	0343	Ash Mountain	WB	Tulare	1708	36	29	118	50	1925	US Natl. Park Service
B0		Atwater Craig		Merced	150	37	21	120	37	1961	H. J. Craig
C2	0374	Atwell	S	Tulare	6400	36	28	119	40	1949	Corps of Engineers
B7	0379	Auberry	WB	Fresno	2005	37	05	119	29	1915	Pete E. Dubose
B7	0381	Auberry Valley		Fresno	1300	37	02	119	34	1954	Mrs. George Marshall
C0	0396-02	Avenal-Walden		Kings	810	36	00	120	08	1957	L. F. Walden
C7	0399	Avenal Orchard Ranch		Kings	712	35	48	120	05	1919	E. R. Orchard
C7	0399-01	Avenal 8 SW		Kings	1424	35	58	120	13	1957	J. A. Sagaser
C7	0399-02	Avenal 6 SSW		Kings	1565	35	56	120	10	1953	Leslie Sagaser
C2	0422	Badger	WB	Tulare	3030	36	38	119	01	1940	Lucille E. Weddle
B5	0425	Badger Pass	S	Mariposa	7300	37	40	119	40	1941	US Natl. Park Service
B5	0430	Bagby		Mariposa	824	37	37	120	08	1958	Chris Mills
C0	0440	Bakersfield 1 W		Kern	400	35	23	119	02	1913	Kern County Land Co.
C0	0442	Bakersfield WB Airport	WB	Kern	495	35	25	119	03	1933	US Weather Bureau
C1	0449	Balch Power House	WB	Fresno	1720	36	55	119	05	1921	PG&E Company
C1	0534	Barton Flat	S	Fresno	3760	36	49	118	53	1961	Corps of Engineers
B5	0570	Bear Valley Trabucco		Mariposa	2000	37	34	120	07	1952	Harold Trabucco
B3	0573	Beardsley Dam		Tuolumne	3416	38	12	120	05	1958	Oakdale Irrig. Dist.
C2	0596	Beartrap Meadow	S	Tulare	6800	36	41	118	52	1959	Corps of Engineers
B4	0617	Beehive Meadow	S	Tuolumne	6500	38	00	119	47	1947	Hetch Hetcy Wtr. Sup.
C0	0631	Bellevue		Kern	369	35	20	119	07	1961	Kern County Land Co.
V2	0684	Benton Insp. Sta		Mono	5460	37	50	118	29	1959	John M. Patterson
B0	0688-02	Berenda 2 N		Madera	270	37	04	120	08	1959	Dept. Water Resources
B7	0755	Big Creek PH No. 1		Fresno	4928	37	12	119	15	1915	So. Calif. Edison Co.
B7	0755-01	Big Creek PH No. 2		Fresno	3000	37	12	119	18	1913	So. Calif. Edison Co.
B7	0755-02	Big Creek PH No. 3		Fresno	1400	37	09	119	23	1922	So. Calif. Edison Co.
B7	0755-05	Big Creek PH No. 8		Fresno	2260	37	12	119	20	1921	So. Calif. Edison Co.
V2	0767	Big Pine Creek	S	Inyo	10000	37	08	118	28	1948	Dept. Water Resources
V2	0776	Big Pine PH No. 3		Inyo	4680	37	08	118	19	1925	LA Dept Water & Power
V2	0819	Bishop Creek Intake 2	WB	Inyo	8154	37	15	118	35		Calif. Elec. Power Co.
C1	0821	Bishop Pass Snow Course	S	Fresno	11040	37	06	118	34	1950	Corps of Engineers
V2	0824	Bishop Union Carbide	WB	Inyo	9390	37	22	118	43	1957	Union Carbide Co.
C6	0825-01	Bitter Creek	Ss	Kern	1250	35	00	119	20	1961	B. J. Snedden
C0	0875	Blackwells Corner	WB	Kern	644	35	37	119	52	1944	Dean Sams
C1		Blasingame		Fresno	1050	36	58	119	27	1961	Calif. Div. Forestry
C1	1069-01	Bretz Mill		Fresno	3250	37	02	119	14	1960	US Forest Service
D1	1170	Buena Vista	WB	San Benito	1640	36	46	121	11	1932	Mrs. Lola F. Galli
C0	1174	Buena Vista Ranch		Kern	310	35	20	119	17	1914	Kern County Land Co.
C0	1175	Buena Vista Ranch M & L		Kern	286	35	12	119	18	1955	Miller & Lux Inc.
C0		Buena Vista Ranch M & L 2		Kern	290	35	14	119	18	1962	J. G. Boswell Co.
C6	1199-01	Burgess Corrals	Ss	Kern	1600	34	58	119	19	1960	B. J. Snedden
C0	1244	Buttonwillow	WB	Kern	268	35	24	119	28	1940	Buena Vista W.S. Dist.
B2	1277	Calaveras Big Trees	WB	Calaveras	4696	38	17	120	19	1929	Calif. Div Beaches & Pks
B3	1280	Calaveras Ranger Sta	WB	Calaveras	3343	38	12	120	22	1944	US Forest Service
C4	1300	Calif. Hot Springs RS	WB	Tulare	2950	35	53	118	41	1907	US Forest Service
C3	1425	Camp Nelson		Tulare	4825	36	08	118	37	1959	John F. Lewis
C0	1479	Canfield Ranch		Kern	334	35	17	119	10	1952	Kern County Land Co.
V7	1488	Cantil	WB	Kern	2010	35	18	117	58	1955	Postmaster
C0	1490	Cantua Ranch		Fresno	295	36	30	120	19	1955	Giffen Ranch
C0	1557	Caruthers 4 E		Fresno	265	36	33	119	46	1960	R. L. Kincade
B0	1580	Castle AFB		Merced	170	37	22	120	34	1951	US Air Force
B8	1583	Castle Rock Rad. Lab.		San Joaquin	625	37	38	121	32	1956	Lawrence Rad. Lab.
B5	1588	Cathay Bull Run Ranch	WB	Mariposa	1425	37	24	120	03	1940	Wm. H. Alison
B5	1588-01	Cathay Meyer Ranch		Mariposa	2250	37	29	120	04	1957	Horace Meyer
B5	1588-03	Cathay 3 NNW		Mariposa	1250	37	29	120	07	1957	William Pierce
B6	1590	Cathay Sawyer Ranch		Mariposa	1275	37	26	120	06	1957	W. H. Sawyer

TABLE A-1

PRECIPITATION STATION INDEX (Continued)

Drainage Basin	Alpha Order Number	Station Name		County	Elev.	Lat.		Long.		Record Began	Observer
						Deg.	Min.	Deg.	Min.		
B6	1591	Cathay Stonehouse		Mariposa	1210	37	25	120	05	1951	S. S. Spurgin
B6	1611	Cedar Point Ranch	WB	Mariposa	3230	37	28	119	44	1957	Closed July 1, 1962
B4	1697	Cherry Valley Dam	WB	Tuolumne	4765	37	58	119	55	1955	Hetch Hetchy Wtr. Sup.
B7	1737	Chiquito Creek	S	Madera	7290	37	30	119	23	1961	Dept. Water Resources
D3	1743	Cholame Hatch Ranch	WB	San Luis Obpo	1975	35	41	120	12	1925	Everett C. Hatch
C7	1743-02	Cholame Twisselman		San Luis Obpo	1675	35	34	120	07	1951	H. A. Twisselman
Z2	1754	Chuchupate Ranger Sta.	WB	Ventura	5260	34	48	119	01	1941	US Forest Service
C0		Citrus		Kern	660	35	02	118	58		Kern County Land Co.
B7	1844	Clover Meadows G.S.	S	Madera	7002	37	32	119	17	1945	Dept. Water Resources
C0	1864	Coalinga	WB	Fresno	671	36	09	120	21	1942	Coalinga Fire Dept.
C0		Coalinga C.D.F.		Fresno	690	36	08	120	22	1961	Calif Div of Forestry
C7	1864-02	Coalinga Roberts Ranch		Fresno	1350	36	02	120	27	1953	R. J. Roberts
C0	1867	Coalinga 1 SE	WB	Fresno	663	36	08	120	21	1911	Union Oil Company
C7	1869	Coalinga 14 WNW	WB	Fresno	1640	36	14	120	34	1949	Mrs. Charles Howell
B6	1878	Coarsegold		Madera	2363	37	16	119	42	1952	Mrs. Dorothy McAlliste
C0	1885	Coit Ranch Hdqtrs.		Fresno	278	36	42	120	28	1954	Coit Ranch
B4	1904	Cold Springs		Tuolumne	5680	38	10	120	03	1961	John D. Morrison
B3	2003	Copperopolis		Calaveras	970	37	59	120	38	1954	Corps of Engineers
C0	2012	Corcoran Irrig. Dist.	WB	Kings	200	36	06	119	34	1912	S. S. Whitehead
C0	2013	Corcoran El Rico 1		Kings	198	36	03	119	39	1958	J. G. Boswell Co.
C0	2013-05	Corcoran El Rico 33		Kings	190	35	58	119	42	1951	J. G. Boswell Co.
V2	2069	Cottonwood Creek	S	Inyo	10600	36	29	118	11	1947	Dept Water Resources
V2	2071	Cottonwood Gates		Inyo	3710	36	25	118	02	-	LA Dept Water & Power
B5	2072	Coulterville FFS		Mariposa	1870	37	43	120	12	1959	Calif Div of Forestry
B5	2072-05	Coulterville 5 E		Mariposa	3010	37	43	120	06	1959	Norman Jaenecke
C5	2114	Crabtree Meadow	S	Tulare	10720	36	34	118	20	1950	Corps of Engineers
B7	2122	Crane Valley PH		Madera	3500	37	17	119	32	1903	PG&E Company
V2	2181	Crowley Lake		Mono	6870	37	35	118	42	1920	LA Dept Water & Power
C6	2222	Cummings Valley		Kern	3825	35	07	118	35	1931	Dept Water Resources
D6	2236	Cuyama	WB	Santa Barbara	2240	34	56	119	37	1944	John S. Rowell
D6	2248	Cuyama Ranch	WB	San Luis Obpo	2170	34	59	119	40	1948	Corps of Engineers
B6	2288	Daulton		Madera	410	37	07	119	59	1946	M. M. Greenman
C0	2346	Delano	WB	Kern	323	35	47	119	15	1876	Delano Fire Dept.
B8	2369	Del Puerto Road Camp	WB	Stanislaus	1125	37	25	121	23	1958	Stanislaus County
B0	2375	Delta Ranch		Merced	90	37	07	120	45	1948	Pasquale Bisignani
B0	2389	Denair	WB	Stanislaus	124	37	32	120	48	1917	W. F. Moore
C0	2408	Devils Den SLF		Kern	500	35	46	119	58	1959	South Lake Farms
C0	2436	Di Giorgio		Kern	483	35	15	118	51	1937	Di Giorgio Fruit Corp.
C0	2440-01	Dinuba Alta ID		Tulare	334	36	33	119	23	1944	Alta Irrigation Dist.
C7	2464	Domengine Ranch		Fresno	1000	36	20	120	22	1959	V. Ciesielski
C7	2464-01	Domengine Spring		Fresno	1700	36	20	120	24	1958	V. Ciesielski
B4	2473	Don Pedro Reservoir		Tuolumne	700	37	43	120	24	1940	Hetch Hetchy Wtr Sup
C5	2492	Doublebunk Meadow	S	Tulare	6200	35	57	118	36	1955	Corps of Engineers
B5	2539	Dudley's	WB	Mariposa	3000	37	45	120	06	1909	W. D. McLean
B4	2609	Early Intake PH		Tuolumne	2356	37	53	119	57	1925	Hetch Hetchy Wtr Sup
C1	2653	East Vidette Meadow	S	Tulare	10400	36	44	118	23	1955	Corps of Engineers
C0		Eighth Standard Ranch		Kern	338	35	06	119	02	1963	Kern County Land Co.
V0	2756	Ellery Lake	WB	Mono	9600	37	56	119	14	1924	Calif Elec Power Co.
C7	2785	El Rancho Cantua		Fresno	1020	36	25	120	20	1938	Lyle Christie
B0	2820	El Solyo Ranch		Stanislaus	50	37	37	121	14	1953	John K. Ohm
B0	2860	Escalon Swanson		San Joaquin	125	37	47	121	00	1944	Clark Swanson
B0	2909	Eugene		Stanislaus	173	37	55	120	51	1923	Corps of Engineers
B5	2920	Exchequer Reservoir	WB	Mariposa	484	37	35	120	16	1935	Merced Irrigation Dist
C0	2922	Exeter Fauver Ranch	WB	Tulare	439	36	21	119	04	1938	Charles O. Coulter
B0	2968	Fancher Ranch Camp 3		Merced	225	37	19	120	20	1959	Calif. Packing Corp.
C7	3005	Fellows		Kern	1340	35	11	119	33	1956	Kern Co. Fire Dept.
B0	3063	Firebaugh 9 W		Fresno	185	36	51	120	37	1934	Thomas & Thomas Ranch
C0	3083	Five Points 5 SSW	WB	Fresno	285	36	21	120	09	1942	Raymond Thomas Ranch
C0	3084	Five Points Diener		Fresno	263	36	22	120	06	1933	Frank C. Diener
B7	3093	Florence Lake	WB	Fresno	7344	37	16	118	58	1940	So Calif Edison Co.
C0	3257	Fresno WB Airport	WB	Fresno	326	36	46	119	43	1899	US Weather Bureau
B7	3261	Friant Government Camp	WB	Fresno	410	36	59	119	43	1896	US Bur. Reclamation
V0	3369	Gem Lake	WB	Mono	8970	37	45	119	08	1924	Calif Elec Power Co.
E5	3387	Gerber Ranch	WB	Santa Clara	2140	37	22	121	29	1912	Mrs. Hilda Draghi
C2	3397	Giant Forest	WB	Tulare	6412	36	34	118	46	1921	US Natl Park Service

TABLE A-1

PRECIPITATION STATION INDEX (Continued)

Drainage Basin	Alpha Order Number	Station Name		County	Elev.	Lat. Deg.	Lat. Min.	Long. Deg.	Long. Min.	Record Began	Observer
D1	3422	Gilroy 14 ENE	WB	Santa Clara	1350	37	06	121	20	1940	Seth E. Auser
C0	3428-01	Gin Yard		Kern	295	35	09	119	14	1960	Miller & Lux Inc.
C4	3463	Glennville	WB	Kern	3140	35	43	118	42	1951	Kern Co Fstry & FD
C4	3465	Glennville Fulton RS	WB	Kern	3500	35	44	118	40	1940	US Forest Service
C0	3512	Gosford Feed Mill		Kern	360	35	19	119	05	1953	Kern County Land Co.
B4	3529	Grace Meadow	S	Tuolumne	8900	38	09	119	36	1947	Hetch Hetchy Wtr Sup
C1	3548	Granite Basin	S	Fresno	10000	36	52	118	36	1949	Corps of Engineers
C1	3551	Grant Grove	WB	Tulare	6580	36	44	118	58	1924	US Natl Park Service
B5	3612-03	Green Valley Ranch		Mariposa	3170	37	46	120	09	1957	Mrs. D. Davidson
B4	3669	Groveland 2	WB	Tuolumne	2825	37	50	120	14	1940	Duane J. Cox
B4	3672	Groveland Ranger Sta	WB	Tuolumne	3135	37	49	120	06	1940	USForest Service
B0	3690-02	Gustine 5 SW		Merced	145	37	13	121	03	1927	W. P. Jorgensen
B0	3690-04	Gustine Snyder		Merced	150	37	12	121	03	1954	Harry M. Snyder
B0		Gustine 7 SSW		Merced	156	37	10	121	02	1959	Mrs. George E. Butts
B0	3694	Gustine Avoset		Merced	98	37	15	121	00	1928	Foremost Co.
V7	3710	Haiwee	WB	Inyo	3810	36	08	117	57	1923	LA Dept Water & Power
C0	3747	Hanford	WB	Kings	242	36	20	119	40	1899	Calif Div of Forestry
C1	3811-11	Haslett Basin		Fresno	2400	36	58	119	13	1960	US Forest Service
D1	3925	Hernandez 2 NW	WB	San Benito	2160	36	25	120	55	1940	Max D. Ley
D1	3928	Hernandez 7 SE	WB	San Benito	2765	36	18	120	42	1940	Mrs. Clorene Akers
B4	3939	Hetch Hetchy	WB	Tuolumne	3870	37	57	119	47	1910	Hetch Hetchy Wtr Sup
B6	3948	Hidden Valley		Mariposa	1880	37	26	119	56	1949	Howard Brady
B2	3952	Highland Lakes	S	Alpine	8700	38	30	119	48	1960	Dept Water Resources
B0	3981	Hilmar		Merced	90	37	25	120	51	1948	Hilmar Fire Dept
C2	4012	Hockett Meadows	S	Tulare	8500	36	22	118	39	1959	Corps of Engineers
C0	4061-01	Homeland Dist. Sec 9		Kings	190	35	57	119	36	1952	J. G. Boswell Co.
C0	4061-02	Homeland Dist. Sec 17		Kings	206	35	50	119	37	1952	J. G. Boswell Co.
C0	4061-03	Homeland Dist. Sec 34		Kings	195	35	53	119	34	1951	J. G. Boswell Co.
B5		Hornitos		Mariposa	850	37	30	120	14	1960	Corps of Engineers
B5	4102-01	Hornitos Erickson Ranch		Mariposa	1150	37	30	120	09	1955	Louie Erickson
B5	4103	Hornitos Giles Ranch		Mariposa	1050	37	28	120	14	1939	Arthur Giles
C3	4120	Hossack	S	Tulare	7100	36	11	118	37	1959	Corps of Engineers
B4	4148	Huckleberry Lake	S	Tuolumne	7800	38	06	119	45	1959	Hetch Hetchy Wtr Sup
B3	4170	Hunters Dam	WB	Calaveras	3220	38	12	120	22	1950	PG&E Company
B7	4176	Huntington Lake	WB	Fresno	7020	37	14	119	13	1915	So. Calif Edison Co.
C7	4204	Idria	WB	San Benito	2650	36	25	120	40	1918	New Idria Mine & Chem
V2	4235	Independence Onion Vly	WB	Inyo	9175	36	46	118	20	1948	LA Dept Water & Power
B5	4246	Indian Gulch		Mariposa	1000	37	26	120	12	1952	Frank N. Solari
V7	4278	Inyokern	WB	Kern	2440	35	39	117	49	1937	Kern County Fire Dept
C5	4303	Isabella Dam		Kern	2660	35	39	118	29	1949	Corps of Engineers
B5	4369	Jerseydale GS		Mariposa	3605	37	33	119	50	1958	US Forest Service
C5	4389	Johnsondale	WB	Tulare	4680	35	58	118	32	1954	US Forest Service
B7	4442	Kaiser Meadows	S	Fresno	9110	37	18	119	06	1946	So. Calif Edison Co.
C2	4452	Kaweah PH 3		Tulare	1370	36	29	118	50	1913	So. Calif Edison Co.
C6	4463	Keene		Kern	2575	35	13	118	34	1948	Kern Co. Fire Dept.
B8	4508	Kerlinger	WB	San Joaquin	172	37	41	121	26	1947	Pac. Coast Aggregates
C0	4510-02	Kerman 2 ESE		Fresno	225	36	43	120	01	1960	Dept Water Resources
C5	4513	Kern Canyon		Tulare	700	35	26	118	48	1916	PG&E Company
C5	4518	Kern River Intake No. 3	WB	Tulare	3650	35	57	118	29	1952	Mrs. Lila Lofberg
C5	4519	Kern R. Intake 3 SCE		Tulare	3642	35	57	118	29	1921	So. Calif Edison Co.
C5	4520	Kern River PH No. 1	WB	Kern	970	35	28	118	47	1904	So. Calif Edison Co.
C5	4523	Kern River PH No. 3	WB	Kern	2703	35	47	118	26	1946	So. Calif Edison Co.
C5	4527-01	Kernville RS		Kern	2600	35	45	118	25	1953	Velma Aravjo
C0	4534	Kettleman City 1 SSW	WB	Kings	310	36	00	119	58	1930	Standard Oil Co Calif
C0	4535	Kettleman Hills		Kings	1255	36	02	120	06	1931	Standard Oil Co Calif.
C0	4536	Kettleman Station	WB	Kings	508	36	04	120	05	1933	PG&E Company
B0	4590	Knights Ferry 2 SE	WB	Stanislaus	315	37	48	120	39	1905	Raymond Willms
B3	4664	Lake Alpine	S	Alpine	7500	38	28	120	01	1948	Dept Water Resources
B4	4679	Lake Eleanor	S	Tuolumne	4662	37	58	119	53	1909	Hetch Hetchy Wtr Sup
V2	4705	Lake Sabrina	S	Inyo	9065	37	13	118	37	1948	Calif Elec Power Co
D3	4767	La Panza Ranch	WB	San Luis Obpo	1550	35	23	120	10	1948	Abe E. Zimmerman
C6	4863	Lebec	WB	Kern	3585	34	50	118	52	1940	Kern Co Fire Dept
B5	4883	LeGrand Preston Ranch		Mariposa	984	37	20	120	02	1950	Ray Preston
B0	4884	LeGrand	WB	Merced	255	37	14	120	15	1899	Merced Co Fire Dept
B0	4884-05	LeGrand 5 N		Merced	280	37	19	120	15	1945	James Massengale

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Drainage Basin	Alpha Order Number	Station Name		County	Elev.	Lat.		Long.		Record Began	Observer
						Deg.	Min.	Deg.	Min.		
C2	4890	Lemon Cove	WB	Tulare	513	36	23	119	02	1899	Kaweah Lemon Co.
B0	4953-02	Linden Fire Station		San Joaquin	90	38	01	121	05	1948	E. J. Murphy
C0	4957	Lindsay	WB	Tulare	395	36	11	119	04	1913	Frank DeChaine
B0	4999-03	Livingston 5 W		Merced	112	37	22	120	48	1952	E&J Gallo Winery Rch
C7	5008	Loca Mariana		Fresno	1700	36	21	120	25	1951	Closed July 1, 1962
B7	5040	Logan Meadow	S	Madera	3400	37	20	119	19	1947	So. Calif Edison Co.
V2	5067	Lone Pine Cottonwood PH	WB	Inyo	3790	36	27	118	03	1940	LA Dept Water & Power
B8	5074	Lone Tree Canyon	WB	San Joaquin	420	37	37	121	23	1933	Edward C. Gerlach
B4	5077	Long Barn		Tuolumne	4963	38	06	120	08	1960	Closed June, 1962
B3	5078	Long Barn Exp. Sta	WB	Tuolumne	5200	38	11	120	01	1940	US Forest Service
C6	5098	Loraine	WB	Kern	2720	35	18	118	26	1941	Charles W. Poole
V2	5111-09	LA Aqueduct Intake		Inyo	3841	36	58	118	12	1919	LA Dept Water & Power
B0	5116	Los Banos 5 S		Merced	175	36	59	120	51	1948	H. G. Fawcett
B0	5117	Los Banos Field Sta		Merced	160	37	01	120	54	1956	US Bur. Reclamation
B0	5118	Los Banos	WB	Merced	125	37	03	120	51	1873	Roger C. Rice
B8	5119	Los Banos Arburua Rch	WB	Merced	860	36	53	120	56	1932	Arburua Ranch
C0	5151	Lost Hills	WB	Kern	285	35	37	119	41	1912	Kern Co. Fstry & FD
C1	5155-51	Lower Big Creek		Fresno	1100	36	55	119	15	1960	US Forest Service
B4	5160	Lower Kibbey Ridge	S	Tuolumne	6500	38	01	119	53	1948	Hetch Hetchy Wtr Sup
B6	5202	Lushmeadows Ranch		Mariposa	3215	37	29	119	50	1959	F. L. Raby
B0	5233	Madera	WB	Madera	268	36	58	120	04	1899	Calif Div of Forestry
C0	5257	Magunden		Kern	440	35	22	118	55	1927	So. Calif Edison Co.
V2	5284	Mammoth Pass	S	Mono	9500	37	37	119	02	1947	LA Dept Water & Power
B0	5297-01	Manteca No. 2		San Joaquin	46	37	48	121	12	1930	Spreckles Sugar Co.
B0	5297-02	Manteca SP		San Joaquin	42	37	48	121	13	1935	Southern Pacific Co.
C7	5338	Maricopa	WB	Kern	685	35	05	119	23	1911	Signal Oil & Gas Co.
C7	5338-01	Maricopa FS		Kern	885	35	04	119	24	1958	Kern Co. Fire Dept.
B5	5346	Mariposa	WB	Mariposa	2011	37	29	119	58	1909	Mrs. Gabrielle Wilson
B5	5346-01	Mariposa Reynolds		Mariposa	2000	37	29	119	58	1958	E. F. Reynolds
B6	5346-04	Mariposa 8 ESE		Mariposa	2780	37	27	119	50	1952	D. A. Boyce
B5	5348	Mariposa Circle 9 Rch		Mariposa	3536	37	33	119	51	1957	Dorothy D. Sevedge
B5	5352	Mariposa RS		Mariposa	2100	37	30	119	59	1943	Calif Div of Forestry
C7	5372-01	Martinez Spring		Fresno	1875	36	20	120	25	1959	V. Ciesielski
B4	5400	Mather	WB	Tuolumne	4515	37	53	119	51	1930	City of San Francisco
B0		Mattos Ranch		Merced	170	36	59	120	51	1961	Roger C. Rice
B0		Maze Bridge 2 S		Stanislaus	35	37	37	121	13	1958	Dept Water Resources
B5	5460	McDiermid Sta		Mariposa	2990	37	43	120	06	1959	James R. Alvis
C7	5480-01	McKittrick FS		Kern	1051	35	18	119	37	1956	Kern Co. Fire Dept
B7	5496	Meadow Lake	WB	Fresno	4480	37	05	119	26	1948	Radio Station KRFM
B3	5511	Melones Dam		Tuolumne	900	37	57	120	31	1955	Oakdale Irrig. Dist.
B0	5526	Mendota 1 NNW		Fresno	172	36	46	120	23	1941	Henry E. Schreiner
C0	5526-04	Mendota Murietta Ranch		Fresno	261	36	39	120	27	1958	Closed July, 1962
B0	5528	Mendota Dam	WB	Fresno	166	36	47	120	22	1873	Frank F. Moitoza
C0	5529	Mendota Halfway Pump		Fresno	450	36	28	120	24	1956	Tidewater Oil Co.
C0	5530	Mendota VDL Farms		Fresno	230	36	45	120	28	1948	Vista Del Llano Farms
B0	5532	Merced Fire Station 2	WB	Merced	169	37	18	120	29	1872	City of Merced
B0	5532-01	Merced SP		Merced	170	37	18	120	29	1872	Southern Pacific Co.
B0	5532-03	Merced 5 SE		Merced	198	37	16	120	23	1959	Dept Water Resources
B0	5534	Merced Fancher Ranch		Merced	212	37	18	120	21	1920	Calif Packing Corp
B0	5535	Merced 2	WB	Merced	168	37	19	120	29	1938	Merced Irrig Dist
B8	5550	Mercey Hot Springs	WB	Fresno	1165	36	42	120	52	1932	Horace C. Swatzel
C3	5669	Milo 5 NE	WB	Tulare	3400	36	17	118	46	1957	Mrs. Ethel Walker
B7		Minarets RS		Madera	5180	37	25	119	21	1962	US Forest Service
C2	5680	Mineral King	S	Tulare	7975	36	26	118	35	1956	Corps of Engineers
C2	5708	Miramonte Honor Camp		Fresno	3005	36	40	119	05	1957	Calif Div of Forestry
C1	5723	Mitchell Meadow	S	Fresno	9700	36	45	118	43	1957	Corps of Engineers
B4	5735	Moccasin		Tuolumne	950	37	49	120	18	1935	Hetch Hetchy Wtr Sup
B0	5738	Modesto	WB	Stanislaus	91	37	39	121	00	1926	Modesto Irrig Dist
B0	5740	Modesto KTRB		Stanislaus	93	37	40	120	59	1959	Clifford Price
B0	5741	Modesto 2	WB	Stanislaus	92	37	38	121	00	1942	City of Modesto
V8	5756	Mojave	WB	Kern	2735	35	03	118	10	1947	Kern Co Fire Dept
V8	5758	Mojave 2 ESE	WB	Kern	2680	35	02	118	09	1963	KDOL Radio Station
C5	5777	Monache Meadows	S	Tulare	8000	36	13	118	10	1950	Corps of Engineers
C0		Moody Ranch		Kern	405	35	06	118	58	1963	Kern County Land Co.
C1	5893	Mountain Rest FFS		Fresno	4100	37	03	119	22	1960	US Forest Service

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PRECIPITATION STATION INDEX (Continued)

Drainage Basin	Alpha Order Number	Station Name		County	Elev.	Lat.		Long.		Record Began	Observer
						Deg.	Min.	Deg.	Min.		
V8	6122	Neenach	WB	Los Angeles	2890	34	43	118	35	1931	LA Dept Water & Power
B0	6168	Newman 2 NW	WB	Stanislaus	108	37	21	121	03	1899	Richard A. Smith
B0	6168-01	Newman 1 SE		Merced	80	37	18	121	00	1960	Dept Water Resources
C0	6230-50	North Belridge		Kern	630	35	33	119	47	1953	Belridge Oil Co.
B7	6252	North Fork Ranger Sta	WB	Madera	2630	37	14	119	30	1904	US Forest Service
B0	6303	Oakdale		Stanislaus	155	37	46	120	51	1880	A. L. Gilbert Co.
B0	6305	Oakdale Woodward Dam	WB	Stanislaus	215	37	52	120	52	1918	S San Joaquin I.D.
B6		Oakhurst		Madera	2347	37	20	119	39	1961	Basil E. Judd
C4	6391	Oildale Smoot Ranch		Kern	805	35	31	118	54	1949	Closed July, 1962
C0	6393	Oilfields FFS		Fresno	950	36	15	120	19	1952	Gene Martin
C7	6395	Oilfields Joaquin Ridge	S	Fresno	3620	36	18	120	24	1949	US Weather Bureau
C5		Onyx		Kern	2750	35	42	118	13	1962	Corps of Engineers
C2	6476	Orange Cove	WB	Fresno	431	36	37	119	18	1931	Orange Cove Citrus Asn
B0	6490	Orestimba		Stanislaus	110	37	22	121	04	1896	Central Cal Irr Dist
B5	6552	Ostrander Lake	S	Mariposa	8600	37	38	119	33	1947	US Natl Park Service
B8	6583	Pacheco Pass	WB	Merced	880	37	04	121	11	1949	US Bur. Reclamation
C0	6651	Paloma Ranch		Kern	290	35	11	119	11	1957	Miller & Lux Inc.
B8	6675	Panoche	WB	San Benito	1265	36	36	120	50	1922	Miss Lily Berg
B8	6676	Panoche 2 W		San Benito	1320	36	37	120	53	1957	Malcolm Strohn
B0	6677	Panoche Creek	WB	Fresno	370	36	41	120	35	1963	Employee Enter Inc
C0	6678	Panoche Junction	WB	Fresno	420	36	32	120	27	1938	Closed Oct, 1962
B0	6679-05	Panoche Water Dist		Fresno	183	36	53	120	44	1949	Panoche Water Dist
B4	6688	Paradise Meadow	S	Tuolumne	7700	38	03	119	40	1948	Hetch Hetchy Wtr Sup
D3	6703	Parkfield	WB	Monterey	1482	35	53	120	26	1938	Herbert H. Durham
D3	6706	Parkfield 7 NNW	WB	Monterey	3590	36	00	120	28	1948	Raulston P. Morrison
B0	6746-01	Patterson		Stanislaus	100	37	28	121	07	1912	Yancey Lumber Co.
C6	6754	Pattiway	WB	Kern	3868	34	56	119	23	1915	Hudson Ranch
C2	6767	Pear Lake	S	Tulare	9700	36	36	118	40	1956	Corps of Engineers
B8	6847	Pfeiffer Ranch		Merced	1650	36	53	121	08	1954	Frances S. Pfeiffer
C1	6857	Piedra	WB	Fresno	580	36	48	119	23	1917	Mrs. Ida H. Akers
B3	6893	Pinecrest Strawberry		Tuolumne	5620	38	11	119	59	1922	PG&E Company
C1	6895	Pine Flat Dam		Fresno	615	36	50	119	19	1949	Corps of Engineers
C1	6902	Pinehurst		Fresno	4050	36	42	119	01	1954	US Forest Service
B7		Placer GS		Madera	3670	37	22	119	22	1962	US Forest Service
C0		Pond 1 N		Kern	268	35	44	119	19	1962	Dept Water Resources
C0	7077	Porterville	WB	Tulare	393	36	04	119	01	1893	John H. Daybell
C0	7079	Porterville 3 W		Tulare	413	36	05	119	04	1958	Porterville Irr Dist
C5	7093	Portuguese Meadow	S	Tulare	7000	35	48	118	34	1953	Corps of Engineers
C4	7096	Posey 3 E	WB	Tulare	4920	35	48	118	38	1954	Panorama Height Lodge
C0	7098-11	Poso Ranch		Kern	370	35	37	119	16	1913	Kern County Land Co.
B0	7099-11	Poso Canal Co Hdq		Fresno	125	36	59	120	30	-	Central Cal Irr Dist
B4	7145	Priest		Tuolumne	2245	37	49	120	16	1928	Hetch Hetchy Wtr Sup
D2	7150	Priest Valley	WB	Monterey	2300	36	11	120	42	1898	Nelson H. Palmer
C5	7179	Quaking Aspen	S	Tulare	7200	36	07	118	32	1955	Corps of Engineers
C1	7259	Rattlesnake Creek	S	Fresno	9900	36	59	118	43	1961	Corps of Engineers
C7	7254-01	Rattlesnake Springs		Fresno	1400	36	22	120	28	1951	Closed June 30, 1962
B6	7270-01	Raymond 3 SSW		Madera	635	37	11	119	56	1940	Sam Wood
B6	7272-01	Raymond 10 N		Mariposa	1640	37	22	119	54	1957	Fred Bunning
B6	7273	Raymond 9 N	WB	Mariposa	1210	37	21	119	53	1962	Richard W. Schall
B6	7276	Raymond 12 NNE		Mariposa	1600	37	23	119	50	1954	L. E. Schatz
C0	7288	Rector		Tulare	344	36	18	119	15	1888	So Calif Edison Co.
C0		Reedley MVFD		Fresno	345	36	37	119	27	1962	Mid-Valley Fire Dist
B0		Ripon		San Joaquin	65	37	45	121	07	1963	Mr. Arthur N. Clemens
C0	7460	Riverdale		Fresno	220	36	26	119	52	1917	Mid-Valley Fire Dist
V2	7510	Rock Creek	S	Inyo	9670	37	27	118	44	1947	Dept Water Resources
B6	7528	Rocky Village		Mariposa	570	37	22	120	10	1957	W. R. Down
C0	7555	Rosedale		Kern	380	35	26	119	08	1914	Kern County Land Co.
B7	7560	Rose Marie Meadow	S	Fresno	10000	37	19	118	52	1953	So Calif Edison Co.
C5	7579	Round Meadow	S	Tulare	9000	35	58	118	21	1947	Corps of Engineers
B4	7623	Saches Springs	S	Tuolumne	7900	38	06	119	51	1948	Hetch Hetchy Wtr Sup
C7	7687-02	Salt Creek		Fresno	575	36	25	120	24	1951	Closed July 1, 1962
D1	7719	San Benito	WB	San Benito	1355	36	31	121	05	1936	John M. Shields
Z2	7735	Sandberg WB	WB	Los Angeles	4517	34	45	118	44	1933	US Weather Bureau
C0	7753	San Emigdio Ranch	WB	Kern	1450	35	00	119	12	1901	Kern County Land Co.
D1	7755	San Felipe Highway Sta	WB	Santa Clara	365	37	01	121	20	1943	Div of Highways

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PRECIPITATION STATION INDEX (Continued)

Drainage Basin	Alpha Order Number	Station Name		County	Elev.	Lat. Deg.	Lat. Min.	Long. Deg.	Long. Min.	Record Begun	Observer
C0	7800-02	Sanger 1 NE		Fresno	375	36	44	119	33	1959	G. L. Minter
C0	7800-03	Sanger RS		Fresno	375	36	44	119	33	1958	Calif Div of Forestry
C0	7816	San Joaquin		Fresno	174	36	36	120	11	1919	James Irrig Dist
C0		San Joaquin MVFD		Fresno	174	36	36	120	11	1962	Mid-Valley Fire Dist
B7	7817	San Joaquin Exp Range	WB	Madera	1100	37	06	119	44	1934	US Forest Service
B0	7836-01	San Juan Hdqrs M&L		Merced	105	37	05	120	39	1947	Miller & Lux Inc.
B8	7846	San Luis Dam	WB	Merced	260	37	03	121	04	1963	US Bur. Reclamation
B0	7855	San Luis Canal Co Hdq		Merced	106	37	03	120	40	1944	San Luis Canal Co.
D7	8259-02	Simmler R. W. Cooper		San Luis Obpo	2040	35	24	120	06	1936	R.W. Cooper
D7	8259-04	Simmler Maint Sta		San Luis Obpo	2030	35	21	119	59	1946	Div of Highways
D2	8276	Slack Canyon	WB	Monterey	1730	36	05	120	40	1955	Calif Div of Forestry
C6	8304	Smith Flat	Ss	Kern	3800	34	54	119	21	1960	Mr. B. J. Snedden
B5	8318	Snow Flat	S	Mariposa	8700	37	50	119	30	1947	Dept Water Resources
C1	8323-01	Soaproot Saddle		Fresno	3830	37	02	119	15	1960	US Forest Service
D7	8326	Soda Lake		San Luis Obpo	1960	35	15	119	55	1925	Dewey Werling
B4	8353	Sonora	WB	Tuolumne	1830	37	59	120	23	1887	PG&E Company
G9	8355	Sonora Junction	WB	Mono	6886	38	21	119	27	1959	Div of Highways
C0	8375-50	South Belridge		Kern	575	35	27	119	43	1938	Belridge Oil Co.
B0	8378	South Dos Palos		Merced	116	36	58	120	39	1938	Southern Pacific Co.
B5	8380	So Entrance Yosemite NP	WB	Mariposa	5120	37	30	119	38	1941	US Natl Park Service
V2	8406	South Lake	S	Inyo	9580	37	11	118	34	1948	Calif Elec Power Co
C0	8407-11	South Lake Farms Hdq.		Kings	190	35	56	119	39	1959	South Lake Farms
B3	8450	Spring Gap Forebay		Tuolumne	3000	38	11	120	06	1921	PG&E Company
C3	8455	Springville 7 ENE	WB	Tulare	2470	36	10	118	42	1953	Elmer A. Sutton
C3	8460	Springville RS	WB	Tulare	1050	36	08	118	48	1924	USForest Service
C3	8463	Springville Tule Headwrks	WB	Tulare	4070	36	12	118	39	1907	PG&E Company
C2		Squaw Valley		Fresno	1750	36	45	119	13	1961	Edgar Young
B3	8499	Stanislaus Power House	WB	Tuolumne	1130	38	08	120	22	-	PG&E Company
C1	8510	State Lakes	S	Fresno	10300	36	56	118	35	1955	Corps of Engineers
C0	8520	Stevenson Dist Sec 33		Tulare	212	36	03	119	30	1951	J. G. Boswell Co.
C3	8620	Success Dam		Tulare	590	36	03	118	55	1959	Corps of Engineers
C1	8643	Summit Meadow	S	Fresno	6240	37	05	119	13	1960	Dept Water Resources
C7	8752	Taft	WB	Kern	1025	35	09	119	28	1940	Kern Co Fstry & FD
C7	8755	Taft KTKR Radio		Kern	1030	35	09	119	28	1954	Jerry Mann
C6	8826	Tehachapi	WB	Kern	3975	35	08	118	27	1876	Mrs. Anita Cowan
C6	8832	Tehachapi RS	WB	Kern	3975	35	08	118	27	1940	Kern Co Fire Dept.
C6	8839	Tejon Rancho	WB	Kern	1425	35	02	118	45	1895	Tejon Ranch Co.
C2	8868	Terminus Dam		Tulare	965	36	25	119	00	1959	Corps of Engineers
C7		Thirty-Two Corral		Fresno	1700	36	19	120	22	1959	V. Ciesielski
C2	8912	Three Rivers 6 SE	WB	Tulare	2200	36	22	118	51	1940	Glenn Baker
C2	8914	Three Rivers Edison PH 2	WB	Tulare	950	36	28	118	53	1909	So Calif Edison Co
C2	8917	Three Rivers Edison PH 1	WB	Tulare	1140	36	28	118	52	1940	So Calif Edison Co
B0	8997	Tracy 2 SSE	WB	San Joaquin	105	37	43	121	25	1951	Aage R. Tugel
B8	8999	Tracy Carbona	WB	San Joaquin	140	37	42	121	25	1934	Banta Carbona Irr Co
C0	9006	Tranquillity Glotz		Fresno	165	36	37	120	14	1953	Ted Gromala
C0		Traver 4 ESE		Tulare	285	36	26	119	24	1962	Dept Water Resources
C1	9025	Trimmer RS		Fresno	736	36	54	119	17	1948	US Forest Service
C0	9051	Tulare		Tulare	293	36	13	119	20	1919	So Calif Edison Co
C0	9051-04	Tulare Dist Sec 27		Kings	179	36	04	119	48	1953	J. G. Boswell Co.
C0	9052	Tulefield	WB	Kern	295	35	09	119	01	1948	Kern County Land Co
C3	9059	Tule River Intake		Tulare	2450	36	10	118	42	1910	So Calif Edison Co
C3	9060	Tule River PH		Tulare	1240	36	08	118	47	1910	So Calif Edison Co
C5	9061	Tunnel RS	S	Tulare	8950	36	22	118	17	1945	Dept Water Resources
B3	9062	Tulloch Dam		Calaveras	515	37	53	120	36	1958	Oakdale Irrig Dist
B4	9063	Tuolumne Meadows	S	Tuolumne	8600	37	53	119	20	1947	Dept Water Resources
B0	9073	Turlock	WB	Stanislaus	104	37	29	120	51	1893	Carl A. Pearson
B0	9073-01	Turlock 5 SW		Stanislaus	76	37	28	120	55	1958	Chatom Co. Ltd.
B0	9073-02	Turlock 8 WSW		Stanislaus	60	37	27	120	58	1958	Herbert Ellis
C0	9145	US Cotton Field Sta		Kern	367	35	32	119	17	1922	US Dept. Agriculture
B7		Upper Chiquito		Madera	6800	37	30	119	24	1962	US Forest Service
D1	9189	Upper Tres Pinos	WB	San Benito	2050	36	38	121	02	1940	Eldon Fancher
B8	9238-01	Valley View Mine		San Benito	1575	36	38	120	56	1960	Closed June, 1962
B7	9301	Vermilion Valley	S	Fresno	7520	37	22	118	59	1947	So Calif Edison Co
B0	9302-01	Vernalis 3 SE		Stanislaus	69	37	37	121	13	1958	See Maze Bridge 2 S
C0	9304	Vestal		Tulare	500	35	50	119	05	1920	So Calif Edison Co

TABLE A-1

PRECIPITATION STATION INDEX (Continued)

Drainage Basin	Alpha Order Number	Station Name		County	Elev.	Lat. Deg.	Lat. Min.	Long. Deg.	Long. Min.	Record Began	Observer
C0	9367	Visalia	WB	Tulare	354	36	20	119	18	1903	Tulare Co. C of C
C0	9369	Visalia 4 E		Tulare	357	36	20	119	13	1959	J. V. Pimentel
C0	9452	Wasco	WB	Kern	333	35	36	119	20	1899	Kern Co Fstry & FD
B5	9482	Wawona RS	WB	Mariposa	3965	37	32	119	40	1934	US Natl Park Service
C5	9512	Weldon 1 WSW	WB	Kern	2680	35	40	118	18	1940	Vernon J. Blount
C0	9535	West Camp SLF		Kings	290	35	51	119	53	1959	South Lake Farms
B6		Westfall RS		Madera	4795	37	27	119	39	1958	US Forest Service
C0	9560	Westhaven	WB	Fresno	285	36	13	119	59	1925	Boston Ranch Co
B0	9565	Westley		Stanislaus	85	37	33	121	12	1928	W. Stanislaus Irr Dist
C5	9602	Wet Meadow	S	Tulare	9200	36	22	118	32	1959	Corps of Engineers
C0		Wilbur Ditch		Kings	210	35	56	119	45	1961	South Lake Farms
C1	9749	Wishon Res		Fresno	6600	37	01	118	58	1957	PG&E Co
C5	9754	Wofford Heights	WB	Kern	2700	35	43	118	27	1894	James H. Jorgensen
C1	9773	Woodchuck Meadow	S	Fresno	9200	37	02	118	54	1955	Corps of Engineers
C4	9805	Woody		Kern	1630	35	42	118	51	1953	Kern Co Fstry & FD
B5	9855	Yosemite Natl Park	WB	Mariposa	3985	37	45	119	35	1904	US Natl Park Service

TABLE A-2

MONTHLY PRECIPITATION

(In inches)

Drainage Basin	Alpha Order Number	Station Name		Seasonal Total	1962						1963					
					July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar	Apr.	May	June
C0	0009	Academy		14.39	.00	.00	.04	.93	.00	.34	3.85	2.42	2.69	3.51	.58	.00
B6	0049	Ahwahnee 2 NNW		29.77	.08	T	.07	1.82	.40	1.35	6.46	7.70	4.66	5.94	1.18	.11
C0	0204	Angiola	CD	6.27	.00	.00	.08	.09	.00	.03	.60	1.45	1.40	1.75	.17	.70
C7	0215	Annette		8.04	.00	.00	.00	.44	.00	.22	1.62	2.38	2.00	1.23	.15	.00
D6	0239	Apache Camp	HPD	6.80	.00	.00	.00	.13	.00	.00	.07	2.67	1.65	1.97	.29	.02
C0	0332	Arvin		5.65	.00	.00	.03	.25	T	.00	.18	1.36	1.27	1.13	1.13	.30
C0	0332-02	Arvin Frick		4.52	.00	.00	.06	.28	.00	.02	.25	1.11	1.32	.93	.51	.04
C2	0343	Ash Mountain	CD	29.61	.06	.00	.21	.91	.15	.01	6.37	7.33	4.89	8.54	1.07	.07
B0		Atwater Craig		14.19	T	.00	T	.41	.28	2.06	1.31	4.53	1.87	3.34	.32	.07
C2	0374	Atwell	S	42.02					July 24, 1962 to July 2[illegible], 1963							
B7	0379	Auberry	CD	24.15	.15	T	.03	1.27	.11	.55	7.27	4.68	4.60	4.71	.76	.02
B7	0381	Auberry Valley		22.82	.00	.00	T	1.50	.05	.80	4.85	4.70	4.50	5.42	.90	.10
C0	0396-02	Avenal-Walden		6.33	.00	.00	.00	.12	.00	.23	1.13	2.76	.64	.58	.86	.01
C7	0399	Avenal Orchard Ranch		5.88	.00	.00	.00	.10	.00	.12	1.22	1.70	.68	1.32	.68	.06
C7	0399-01	Avenal 8 SW		11.91	.00	.00	.00	.53	.00	.45	3.11	3.55	1.91	1.46	.83	.07
C7	0399-02	Avenal 6 SSW		9.25	.00	.00	.00	.35	.00	.35	1.97	3.48	1.18	1.15	.74	.03
C2	0422	Badger	HPD	23.46	.00	.00	.13	1.19	.13	.00	8.68	2.98	3.65	5.99	.63	.08
B5	0425	Badger Pass	S	43.75					April 22, 1962 to April 28, 1963							
B5	0430	Bagby		25.76	.20	.00	.05	2.50	.57	3.08	4.55	3.25	5.39	6.17	.00	T
C0	0440	Bakersfield 1 W		4.61	.00	.00	T	.12	.00	.00	.12	1.19	1.39	1.17	.26	.36
C0	0442	Bakersfield WB Airport	R CD	4.55	.00	.00	.02	.23	T	T	.12	1.54	1.25	.85	.26	.28
C1	0449	Balch Power House	HPD CD	31.89	.03	.00	.11	1.47	.18	.05	10.93	5.82	4.77	7.20	.65	.68
C1	0534	Barton Flat	S	26.23					July 23, 1962 to July 22, 1963							
B5	0570	Bear Valley Trubucco		25.81	.00	.00	.15	2.65	.75	3.64	4.56	3.04	2.88	6.99	1.15	.00
B3	0573	Beardsley Dam		40.54	.30	.16	.35	2.98	1.05	2.66	5.91	8.37	6.08	8.24	3.70	.74
C2	0596	Beartrap Meadow	S	52.31					July 23, 1962 to July [illegible], 1963							
B4	0617	Beehive Meadow	S	53.94					September 12, 1962 to September 12, 1963							
C0	0631	Bellevue		4.70	.00	.00	.04	.25	.00	.00	.02	1.38	1.01	.89	.56	.55
V2	0684	Benton Insp Sta		8.56	.38	.00	.52	.01	.01	.00	4.06	.52	1.01	.32	.87	.86
B0	0688-02	Berenda 2 N		11.87	.00	.00	.02	.60	.13	2.07	1.37	2.54	1.82	2.80	0.52	T
B7	0755	Big Creek PH No. 1	SCE b	38.29	.03	.00	.42	1.54	.32	.25	12.03	5.29	5.97	8.08	3.63	.73
B7	0755-01	Big Creek PH No. 2	SCE b	31.63	.10	.00	.52	1.30	.22	.31	9.82	4.71	5.73	6.87	1.76	.29
B7	0755-02	Big Creek PH No. 3	SCE b	27.40	.07	.00	.40	1.38	.19	.31	6.79	4.21	5.28	7.33	1.30	.14
B7	0755-05	Big Creek PH No. 8	SCE b	31.51	.10	.00	.16	1.20	.20	.34	10.33	5.26	5.27	6.89	1.57	.19
V2	0767	Big Pine Creek	S	24.62					October 29, 1962 to October 23, 1963							
V2	0776	Big Pine PH No. 3		11.54	.00	.00	.54	.00	.00	.00	3.45	4.12	1.51	.77	.33	.82
V2	0819	Bishop Creek Intake 2	R CD	21.90	.28	.00	.90	.05	.08	.00	8.65	2.30	2.85	2.35	1.19	3.25
C1	0821	Bishop Pass Snow Course	S	28.30					September 24, 1962 to October 1, 1963							
V2	0824	Bishop Union Carbide	CD	19.71	.22	.00	1.19	.58	.16	.03	*	V11.00	2.60	2.01	.65	1.27
C6	0825-01	Bitter Creek	Ss	5.05					September 15, 1962 to June 30, 1963							
C0	0875	Blackwells Corner	CD	3.42	.00	.00	.00	.00	.00	.03	.27	1.38	.27	.77	.11	.59
C1		Blasingame		20.07	.05	.00	.17	1.17	.08	.37	4.14	4.43	4.11	4.75	.80	T
C1	1069-01	Bretz Mill		37.98E	.00	.00	.00	2.06	.00	.00	15.67	8.13	5.02	6.50E	.60E	.00
D1	1170	Buena Vista	HPD	M	.00	.00	.00	.89	-	-	2.34	1.69	2.60	2.64	.54	.18
C0	1174	Buena Vista Ranch		3.82	.00	.00	.00	.14	.00	.00	T	1.18	1.04	.60	.49	.37
C0	1175	Buena Vista Ranch M & L		3.80	.00	.00	.00	.08	.00	.00	.00	1.14	.64	1.77	.00	.17
C0		Buena Vista Ranch M & L 2		4.02	.00	.00	.00	.14	.00	.00	.00	1.11	1.14	1.35	.00	.28
C6	1199-01	Burgess Corrals	Ss	5.85					September 15, 1962 to June 30, 1963							
C0	1244	Buttonwillow	CD	3.86	T	.00	.00	T	.00	T	.01	1.33	.71	.74	.56	.51
B2	1277	Calaveras Big Trees	CD	61.96	.09	.00	.28	7.36	1.34	3.82	11.39	11.27	8.61	13.04	3.71	1.05
B3	1280	Calaveras Ranger Sta	HPD	M	-	.00	.10	5.68	1.09	3.04	14.64	4.84	8.44	9.59	2.78	1.26
C4	1300	Calif Hot Springs RS	HPD	M	.00	.00	-	-	.13	.04	4.38	5.38	4.01	5.14	-	.64
C3	1425	Camp Nelson		28.70	.00	.00	.00	.00	.00	.00	8.00	9.26	4.64	5.17	.88	.75
C0	1479	Canfield Ranch		3.88	.00	.00	T	.18	.00	.00	T	1.00	1.02	.80	.45	.43
V7	1488	Cantil	CD	1.79	.00	.00	.00	.05	.00	.00	.20	.90	.51	T	.00	.13
C0	1490	Cantua Ranch		8.51E	.00E	.00E	.00E	.01	.00E	2.35	.60	3.35	.35	1.68	.17	.00E
C0	1557	Caruthers 4 E		8.48E	.00	.00	.13	.28	.04E	.32	.86	2.52	1.37	2.57	.25	.14
B0	1580	Castle AFB		14.14	T	.00	.00	.40	.27	2.89	2.37	3.03	1.87	2.82	.44	.05
B8	1583	Castle Rock Rad Lab	(R)	10.04	.00	.00	T	.91	.25	1.54	1.09	2.58	1.44	1.89	.34	.00
B5	1588	Cathay Bull Run Ranch	HPD CD	24.50	T	T	.10	2.00	.29	2.94	3.06	4.51	4.35	6.33	.91	.01
B5	1588-01	Cathay Meyer Ranch		31.68E	.00E	.00E	.00E	2.50	.47	3.15	4.70	6.00	5.35	7.62	1.70	.19
B5	1588-03	Cathay 3 NNW		24.87	.00	.00	.00	2.22	.45	3.25	4.33	3.78	4.52	5.22	1.10	.00
B6	1590	Cathay Sawyer Ranch		25.32	.03	.01	.03	2.00	.39	2.72	3.54	4.45	4.27	5.36	2.50	.02
B6	1591	Cathay Stonehouse		23.24	.00	.00	.00	2.12	.33	2.92	3.90	4.18	3.70	5.14	.93	.02
B4	1697	Cherry Valley Dam	CD	52.34	.06	.11	.25	2.73	.88	3.34	10.26	12.73	6.90	9.83	3.56	1.69
B7	1737	Chiquito Creek	S	46.02					July 25, 1962 to July 16, 1963							
D3	1743	Cholame Hatch Ranch	HPD	8.05	.00	.00	.00	.28	.00	.20	1.16	2.50	1.59	1.44	.65	.23
C7	1743-02	Cholame Twisselman		8.56	.00	.00	.00	.27	.00	.09	.46	2.90	2.04	1.85	.75	.20
Z2	1754	Chuchupate Ranger Sta	HPD	M	.00	.00	.00	.10	.00	-	.64	2.35	2.19	1.68	.04	.11
C0		Citrus		M										RB	.38	.28
B7	1844	Clover Meadows GS	S	45.84					July 25, 1962 to July 16, 1963							
C0	1864	Coalinga	CD	8.27	.00	.00	.00	.04	T	1.36	1.85	2.35	.70	1.25	.64	.08
C0		Coalinga CDF		6.24	.00	.00	.00	.05	.00	.00	1.80	2.49	.68	.67	.49	.06
C7	1864-02	Coalinga Roberts Ranch		15.17	.00	.00	.00	.47	.00	2.85	2.73	3.76	2.67	2.02	.63	.04
C0	1867	Coalinga 1 SE	HPD	7.04	.00	.00	.00	.08	.00	1.23	1.54	1.90	.59	.91	.74	.09
C7	1869	Coalinga 14 WNW	CD	15.29	.00	.00	.00	.41	.00	2.78	3.80	3.46	2.35	2.00	.36	.13
B6	1878	Coarsegold		28.16	.12	.03	.22	1.77	.24	1.19	5.38	6.45	4.88	7.03	.80	.05
C0	1885	Coit Ranch Hdqtrs		8.04	.00	.00	T	.00	.00	2.16	.06	3.31	.84	1.39	.10	.18
B4	1904	Cold Springs		47.01E	.30E	.15E	.25E	3.82	.95	3.79	7.72	7.12	5.82	11.07	4.22	1.80
B3	2003	Copperopolis	R	28.55	.15	.00	.05	3.30	.92	2.76	5.80	3.16	4.45	6.71	.79	.46
C0	2012	Corcoran Irrig Dist	HPD CD	6.54	.00	.00	.00	.05	.00	.04	.48	2.22	1.20	1.80	.48	.27
C0	2013	Corcoran El Rico 1		6.53	.00	.00	.00	.06	.00	.09	.36	2.24	1.04	2.22	.21	.31
C0	2013-05	Corcoran El Rico 33		7.36	.00	.00	.17	.08	.00	.06	.24	2.41	.99	1.89	.83	.69
V2	2069	Cottonwood Creek	S	20.49					October 25, 1962 to October 17, 1963							
V2	2071	Cottonwood Gates		10.34	.00	.00	.10	.00	.00	.05	4.80	3.40	1.09	.13	.02	.75
B5	2072	Coulterville FFS		29.12E	.23	.00	.04	2.12	.61	2.52	3.65	6.59	5.24E	6.05	1.99	.08
B5	2072-05	Coulterville 5 E		39.07	.23	.00	.12	2.82	.73	3.56	11.34	5.26	5.28	7.58	1.99	.16
C5	2114	Crabtree Meadow	S	28.30					September 17, 1962 to September 21, 1963							
B7	2122	Crane Valley PH	R	43.26	.24	.05	.15	2.10	.29	.74	14.32	8.82	6.77	7.83	1.61	.34
V2	2181	Crowley Lake		17.08	.10	T	.54	.29	T	T	7.26	4.28	2.21	1.11	.42	.87
C6	2222	Cummings Valley		8.34	.00	.00	.00	.33	.01	.00	.00	2.71	1.87	2.30	.40	.72
D6	2236	Cuyama	CD	M	.00	.00	.00	.12	.00	.00	M	2.12	.97	.91	.09	.18
D6	2248	Cuyama Ranch	HPD	3.86	.00	.00	.00	.00	.00	.00	.22	1.39	.93	.65	.57	.10
B6	2288	Daulton		14.18	.00	.00	T	.85	.15	1.50	2.70	1.50	2.57	4.24	.67	.00
C0	2346	Delano	CD	6.41	.00	.00	.15	.11	.00	T	.23	1.48	1.36	1.37	.89	.82
B8	2369	Del Puerto Rd Camp	(R) CD (P)	15.21	.00	.00	T	1.21	.16	1.85	3.06	2.98	2.29	3.09	.45	.12
B0	2375	Delta Ranch		9.47M	.00	.00	.00	.22	.17	1.81	1.08	2.65M	1.37	1.70	.29	.18
B0	2389	Denair	CD	13.31	.00	.00	.00	.22	.30	1.36	1.58	3.46	2.62	2.92	.65	.20
C0	2408	Devils Den SLF		5.56	.00	.00	.00	.09	.00	.05	.30	2.50	.48	1.25	.35	.54
C0	2436	DiGiorgio		4.31	.00	.00	.07	.22	T	.00	.17	.97	1.09	1.06	.73	.00

TABLE A-2

MONTHLY PRECIPITATION (Continued)

(In inches)

Drainage Basin	Alpha Order Number	Station Name	Seasonal Total	July	Aug.	Sept.	Oct	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	June
C0	2440-01	Dinuba Alta Irrig Dist	12.05	.00	.00	.26	.46	.04	.17	2.84	2.09	2.29	3.29	.27	.34
C7	2464	Domengine Ranch	9.00	.00	.00	.00	.12	.00	2.53	1.75	1.94	1.09	1.22	.28	.07
C7	2464-01	Domengine Spring	13.25E	.00E	.00E	.00E	.00E	.00E	3.25	*	5.83	1.77	2.00	.40	.00E
B4	2473	Don Pedro Reservoir	21.52	.16	.00	.05	1.68	.49	3.37	3.97	3.17	3.34	4.22	.94	.13
C5	2492	Doublebunk Meadow S	36.90					July 25, 1962 to July 10, 1963							
B5	2539	Dudley's CD	39.95	.37	T	.06	3.18	.70	3.28	9.30	6.36	6.93	7.58	1.95	.24
84	2609	Early Intake PH	37.12	.27	.02	.14	2.84	.64	2.50	6.09	6.68	6.22	7.63	2.68	1.41
C1	2653	East Vidette Meadow S	23.82					August 10, 1962 to August 24, 1963							
C0		Eighth Standard Ranch	M						RB	.05	1.49	1.18	1.33	.51	.02
V0	2756	Ellery Lake CD	30.27	.69	.20	1.90	.87	.55	.80	9.60	2.61	4.15	4.43	2.52	1.95
C7	2785	El Rancho Cantua	7.34E	.00	.00	.00	.00	.00	2.60	1.70	1.32	1.47	.25E	.00E	.00E
B0	2820	El Solyo Ranch	10.97	.00	.00	.00	.47	.35	1.86	1.44	2.82	1.75	1.82	.30	.16
B0	2860	Escalon Swanson	13.55E	.00E	.00E	.02	1.24	.60	2.20	.68	3.12	1.99	3.37	.32	.01
B0	2909	Eugene (R)	16.71	.02	.00	.02	1.52	.55	2.14	.95	3.53	3.70	3.84	.44	.00
B5	2920	Exchequer Reservoir CD	20.13	.09	.00	.04	1.39	.32	2.86	2.36	3.58	4.14	4.06	1.26	.03
C0	2922	Exeter Fauver Ranch HPD	10.03	.00	.00	.18	.37	.00	.00	2.34	1.87	2.07	2.91	.16	.13
B0	2968	Fancher Ranch Camp 3	12.74	.00	.00	.00	.86	.14	2.02	1.45	3.16	1.91	2.80	.40	.00
C7	3005	Fellows	4.90	.00	.00	.00	.07	.00	.00	.01	.98	1.16	.88	1.30	.50
B0	3063	Firebaugh 9 W	11.39E	T	T	.00	T	1.27	.93	1.28	4.26	2.00E	1.50E	.00	.15
C0	3083	Five Points 5 SSW CD	5.85E	.00	.00	.00	.17	.00	1.20	.81	1.64	.50	1.20E	.33	.00
C0	3084	Five Points Diener	4.97	.00	.00	.00	.20	.00	.75	.47	1.69	.37	1.12	.37	T
B7	3093	Florence Lake HPD SCE b	36.89	1.13	.00	.80	1.39	.30	.14	12.09	3.76	6.21	6.06	4.01	1.00
C0	3257	Fresno WB Airport RCD	11.59	T	.00	T	.73	.03	.48	2.16	2.01	2.10	3.66	.39	.03
B7	3261	Friant Government Camp CD	16.24	.00	.00	.18	1.22	.08	.72	2.41	3.26	3.28	4.47	.58	.04
V0	3369	Gem Lake CD	21.81	.56	.40	.75	.95	.44	.85	5.55	1.20	3.46	3.85	2.00	1.80
E5	3387	Gerber Ranch CD	24.09E	.00	.00	T	3.87	.22	1.78	4.64	5.47	3.17	4.10	.71	.13E
C2	3397	Giant Forest HPD CD	46.58	.05	.00	.48	1.73	.33	.08	11.33	12.73	6.62	10.36	2.07	.80
D1	3422	Gilroy 14 ENE CD	24.99	.00	T	T	2.55	.26	1.85	4.80	5.93	3.69	5.36	.41	.14
C0	3428-01	Gin Yard	3.32	.00	.00	.00	.20	.00	.00	.00	1.24	.47	1.34	.00	.07
C4	3463	Glennville CD	11.48	.00	.00	.03	.00	.00	.00	1.10	3.22	2.97	2.95	.57	.64
C4	3465	Glennville Fulton RS HPD	M	.00	.00	-	.69	.00	.00	*	V6.49	-	-	-	-
C0	3512	Gosford Feed Mill	3.74	.00	.00	.00	.13	.00	.00	T	1.01	.81	.81	.56	.42
B4	3529	Grace Meadow S	42.64					September 18, 1962 to September 16, 1963							
C1	3548	Granite Basin S	47.84					August 6, 1962 to August 21, 1963							
C1	3551	Grant Grove HPD CD	41.07	T	.00	.24	1.75	.16	.03	10.07	10.11	6.19	10.69	1.64	.19
B5	3612-03	Green Valley Ranch	39.48	.28	T	T	3.46	.85	3.22	6.08	8.98	5.68	8.23	2.13	.57
B4	3669	Groveland 2 HPD	M	.30	.00	.07	3.81	.80	3.53	-	-	-	-	2.25	.35
B4	3672	Groveland RS CD	42.77	.20	.00	.07	2.38	.80	3.61	8.23	10.96	5.92	8.05	1.98	.57
B0	3690-02	Gustine 5 SW	15.43	.00	.00	.00	.22	.20	1.40	2.65	4.71	1.73	4.17	.27	.08
B0	3690-04	Gustine Snyder	16.07	.00	.00	.00	.20	.19	1.47	3.98	4.15	1.82	3.99	.20	.07
80		Gustine 7 SSW	14.15	.00	.00	.00	.19	.12	1.48	4.14	2.64	1.78	3.58	.18	.04
B0	3694	Gustine Avocet	14.22	.00	.00	.00	.10	.10	1.46	3.72	3.08	2.08	3.44	.17	.07
V7	3710	Haiwee CD	6.81	.00	.00	.54	T	.00	.09	.97	2.78	1.44	.04	T	.95
C0	3747	Hanford CD	8.15	.00	.00	.01	.10	.00	.19	1.19	1.68	1.37	2.88	.56	.17
C1	3811-11	Haslett Basin	33.64E	.00	.00	.00	2.04E	.00	.00	11.80E	8.23	4.77	6.25E	.55E	.00
D1	3925	Hernandez 2NW CD	17.23	.00	.00	.02	1.10	.00	2.17	3.12	3.10	3.73	2.95	.73	.31
D1	3928	Hernandez 7 SE HPD	19.09	.00	.00	.00	.97	.00	2.70	4.46	3.98	2.87	3.30	.52	.29
84	3939	Hetch Hetchy HPD CD	40.08	.20	.24	.74	2.20	1.04	1.66	6.51	7.36	6.07	8.13	3.16	2.77
86	3948	Hidden Valley	35.17	.09	.00	.09	2.75	.58	3.22	7.31	6.93	5.41	7.79	.88	.12
B2	3952	Highland Lakes S	35.79					July 10, 1962 to July 23, 1963							
B0	3981	Hilmar	M	-	-	-	.16	.27	1.67	1.46	-	-	-	-	-
C2	4012	Hockett Meadows S	42.23					July 13, 1962 to August 27, 1963							
C0	4061-01	Homeland Dist Sec 9	6.59	.00	.00	.02	.06	.00	.04	.53	1.98	1.09	1.84	.23	.80
C0	4061-02	Homeland Dist Sec 17	5.41	.00	.00	.00	.05	.00	.03	.33	2.81	.00	1.40	.30	.49
C0	4061-03	Homeland Dist Sec 34	4.56	.00	.00	.02	.05	.00	.00	.27	1.64	.73	1.12	.23	.50
B5		Hornitos R	18.13E	.00	.00	.00	1.50	.23	2.34	2.97	2.81	3.40	4.00	.83	.05E
85	4102-01	Hornitos Erickson Ranch	24.17E	.15	.00E	.10	2.00	.51	2.97	2.42	5.76	4.55	5.07	.64	.00E
B5	4103	Hornitos Giles Ranch	20.14	.05	.00	.05	1.64	.35	2.68	3.59	2.83	3.57	4.54	.78	.06
C3	4120	Hossack S	45.93					October 10, 1962 to July 10, 1963							
B4	4148	Huckleberry Lake S	62.80					September 20, 1962 to September 20, 1963							
B3	4170	Hunters Dam CD P	52.45	.14	T	.13	5.59	1.10	3.17	10.12	9.96	8.06	10.00	2.88	1.30
87	4176	Huntington Lake HPD SCE b	42.51	.10	.00	1.02	2.10	.75	.27	10.83	5.63	8.23	9.73	3.05	.80
C7	4204	Idria CD (R)	14.61	.00	.00	.00	.60	.03	2.31	2.91	2.65	2.61	2.73	.40	.37
V2	4235	Independence Onion Vly HPD	M	.28	.05	.84	.68	.10	.14	-	-	3.67	3.83	2.91	2.77
B5	4246	Indian Gulch	20.77E	.00E	.00E	.10	1.50	.36	2.96	1.98	4.78	3.67	4.65	.72	.05
V7	4278	Inyokern CD	1.84	.00	.00	.00	T	.00	.02	.15	.73	.84	.06	T	.04
C5	4303	Isabella Dam (R)	8.62	.00	.00	.00	.03	.00	.03	1.52	3.06	2.06	1.07	.13	.72
85	4369	Jerseydale GS	52.04	.28	.02	.38	3.30	.93	2.14	11.39	11.76	6.76	11.46	3.04	.58
C5	4389	Johnsondale CD	27.00E	.00	.00	.05	.41	T	.00E	7.31	10.63	3.95	3.43	.76	.46
B7	4442	Kaiser Meadows S	48.87					June 19, 1962 to June 25, 1963							
C2	4452	Kaweah PH No. 3 b	27.31	.04	.00	.22	.82	.07	.05	7.94	4.33	4.56	8.16	1.03	.09
C6	4463	Keene	9.56	.00	.00	T	.71	.00	.00	.12	2.44	2.36	2.83	.45	.65
B8	4508	Kerlinger CD	7.52	.00	.00	T	.58	.31	1.33	.44	2.02	1.14	1.59	.11	.00
C0	4510-02	Kerman 2 ESE	8.71	.00	.00	T	.21	.02	.89	1.23	3.15	2.20	.69	.32	.00
C5	4513	Kern Canyon	6.54	.00	.00	.01	.29	.00	.00	*	V2.44	1.48	1.57	.49	.26
C5	4518	Kern River Intake No. 3 CD	19.85	.00	.00	.03	.11	.00	T	4.59	8.65	3.00	2.47	.48	.52
C5	4519	Kern R. Intake 3 SCE b	20.14	.00	.00	.01	.12	.00	.00	9.31	4.09	2.95	2.57	.44	.65
C5	4520	Kern River PH No. 1 CD	9.96E	.00	.00	T	.41	.00	.00	.52	2.79	2.00E	2.08	1.73	.43
C5	4523	Kern River PH No. 3 CD	12.68	.00	.00	.02	.04	.00	.00	4.83	2.39	3.02	1.88	.17	.33
C5	4527-01	Kernville RS	9.26	.00	.00	.00	.00	.00	.00	3.30	1.99	2.12	1.52	.11	.22
C0	4534	Kettleman City 1 SSW CD	6.61	.01	.00	.00	.05	.00	.04	.51	2.83	.58	1.54	.76	.29
C0	4535	Kettleman Hills	5.41	.00	.00	.00	.08	.00	.19	1.01	1.76	.58	1.00	.75	.04
C0	4536	Kettleman Station CD	5.69	.00	.00	.00	.05	.00	.16	1.02	1.93	.66	1.27	.58	.02
B0	4590	Knights Ferry 2 SE CD	20.31	.01	.00	T	1.17	.78	2.33	1.19	5.46	3.00	5.26	.88	.23
83	4664	Lake Alpine S	69.34					July 10, 1962 to July 23, 1963							
B4	4679	Lake Eleanor S	41.48	.22	.45	.18	2.02	.97	2.44	12.80	3.60	5.70	8.60	3.00	1.50
V2	4705	Lake Sabrina S	21.61	.42	.00	1.40	.40	.18	.05	7.45	1.80	3.33	2.50	1.20	2.88
D3	4767	La Panza Ranch HPD	7.23	.00	.00	.00	.25	.00	.14	1.14	2.15	1.53	1.53	.34	.15
C6	4863	Lebec CD	8.92E	.00	.00	.00	.20	.00	.00E	.04	2.68	3.00	2.67	.04	.29
85	4883	Le Grand Preston Ranch R	18.92E	.00E	.00E	.05E	1.27	.13	2.58	3.50	3.05	3.39	4.36	.59	.00E
B0	4884	Le Grand CD	15.25	.00	.00	.00	1.00	.07	2.92	1.94	2.63	2.55	3.49	.65	.00
80	4884-05	Le Grand 5 N	13.45	.00	.00	.03	1.01	.13	2.30	1.82	2.27	2.37	3.03	.49	.00
C2	4890	Lemon Cove CD	11.88	T	.00	.11	.48	.00	.05	2.74	2.15	2.47	3.64	.18	.06
B0	4953-02	Linden Fire Sta	18.03	.08	.01	.08	2.03	.43	1.96	1.43	4.05	3.44	4.14	.38	.00
C0	4957	Lindsay CD	9.79	.07	.00	.16	.43	.00	.08	1.55	2.24	2.30	2.60	.08	.28
B0	4999-03	Livingston 5 W	15.47	.00	.00	.00	.11	.35	1.68	1.92	5.05	2.15	3.39	.18	.64
B7	5040	Logan Meadow S	39.83					September 25, 1962 to July 1, 1963							
V2	5067	Lone Pine Cottonwood PH HPD	7.84	.00	.00	.15	.00	.00	.03	4.46	1.09	.82	.25	.00	1.04
88	5074	Lone Tree Canyon CD	8.87E	.00	.00	.00	.62	.24	1.50E	.94	2.03	1.20	1.99	.30	.05
B3	5078	Long Barn Exp Sta HPD	48.79	.33	.10	.40	3.61	1.06	3.17	9.26	4.57	9.11	9.72	4.85	2.61

TABLE A-2

MONTHLY PRECIPITATION (Continued)

(In inches)

Drainage Basin	Alpha Order Number	Station Name	Seasonal Total	July	Aug.	Sept.	Oct.	Nov.	Dec	Jan	Feb.	Mar	Apr.	May	June
C6	5098	Loraine HPD	10.25	.00	.00	.00	.71	.00	.00	.56	3.55	2.36	2.19	.40	.48
V2	511-09	LA Aqueduct Intake	9.34	.00	.00	.37	.00	.00	.00	1.01	6.23	.42	.25	.42	.64
B0	5116	Los Banos 5 S	9.55	.00	.00	.00	.12	.11	1.59	1.22	3.22	1.44	1.60	.10	.15
B0	5117	Los Banos Field Sta	9.70	.00	.00	.00	.14	.12	1.67	2.13	2.42	1.28	1.69	.22	.03
B0	5118	Los Banos CD	10.34	.00	.00	.00	.20	.12	1.55	1.55	3.48	1.33	1.83	.19	.09
B8	5119	Los Banos Arburua Ranch CD	8.15	.00	.00	T	.13	.10	1.76	1.38	2.16	.86	1.38	.16	.22
C0	5151	Lost Hills HPD	M	.00	.00	.00	–	.00	.02	.31	1.43	–	1.01	.85	.48
C1	5155-51	Lower Big Creek AS	27.71E	.00	.00	.00	2.05E	.00	.00	8.00E	6.90E	4.20E	6.05E	.51E	.00
B4	5160	Lower Kibbey Ridge S	61.30				September 26, 1962 to September 21, 1963								
B6	5202	Lushmeadows Ranch	37.39E	.24	.00E	.15	3.20E	.75E	2.85	8.10	8.81	3.12	7.95	2.11	.11
B0	5233	Madera CD	9.62	.00	.00	.00	.47	.10	1.18	1.10	2.34	1.40	2.71	.32	.00
C0	5257	Magunden b	4.33	.00	.00	.00	.16	.00	.00	.14	1.17	1.42	.90	.25	.29
V2	5284	Mammoth Pass S	65.95				November 5, 1962 to October 10, 1963								
B0	5297-01	Manteca No. 2	12.32	.00	.00	.00	1.07	.27	1.73	1.15	3.15	2.28	2.41	.23	.03
B0	5297-02	Manteca SP	12.32	.00	.00	T	.99	.32	1.70	1.05	3.18	2.29	2.47	.22	.10
C7	5338	Maricopa CD	3.60	.00	.00	.00	.43	.00	.00	T	.70	.48	.97	.96	.06
C7	5338-01	Maricopa FS	2.81E	.00E	.00E	.00E	.34	.00E	.00E	.01	1.14	.89	.43	.00E	.00E
B5	5346	Mariposa CD	37.80	.09	T	.06	2.79	.67	3.24	7.48	9.05	4.58	8.14	1.52	.18
B5	5346-01	Mariposa Reynolds	38.91	.10	.00	.00	2.23	.71	2.95	8.65	10.12	4.03	8.20	1.60	.32
B6	5346-04	Mariposa 8 ESE	37.03	.24	T	.16	3.25	.73	2.12	5.19	8.18	5.51	9.94	1.61	.10
B5	5348	Mariposa Circle 9 Ranch	50.47	.22	.02	.19	3.30	.93	2.14	11.39	11.76	6.17	11.14	3.04	.17
B5	5352	Mariposa RS (R)	35.98	.00	.02	.00	2.82	.44	3.43	7.89	6.23	5.44	8.09	1.27	.35
C7	5372-01	Martinez Spring	11.06E	.00E	.00E	.00E	.00E	.00E	2.25	*	5.75	1.50	1.28	.28	.00E
B4	5400	Mather CD	31.80	.33	.25	.00	2.33	.73	1.59	6.63	5.49	4.48	6.08	2.24	1.65
B0		Mattos Ranch	10.2)	.00	.00	.00	.15	.10	1.66	1.26	3.19	1.66	1.87	.15	.17
B0		Maze Bridge	10.74	.00	.00	T	.45	.32	1.91	1.31*	2.86	1.81	1.73	.21	.14
B5	5460	McDiermid Sta	40.22	.20	.00	.11	2.82	.68	3.55	8.78	B.25	6.39	7.18	2.13	.13
C7	5480-01	McKittrick FS	4.30	.00	.00	.00	.15	.00	.00	.05	1.22	.94	.44	.97	.53
B7	5496	Meadow Lake CD	31.34	.05	.00	.09	1.75	.12	.73	6.49	7.47	5.69	7.91	.95	.09
B3	5511	Melones Dam	33.00	.14	.00	T	2.32	1.39	2.98	2.86	8.24	6.27	6.99	1.33	.48
B0	5526	Mendota 1 NNW	9.86	.00	.00	T	.29	.02	2.10	.45	3.58	1.23	1.66	.27	.26
B0	5528	Mendota Dam CD	8.23	.00	.00	T	.26	.04	1.88	.49	2.50	1.18	1.47	.26	.15
C0	5529	Mendota Halfway Pump	6.67	.00	.00	.00	T	.00	2.09	.44	2.03	.76	1.05	.15	.15
C0	5530	Mendota VDL Farms	9.96	.00	.00	.00	.25	.00	2.50	.78	3.79	.68	1.31	.15	.50
B0	5532	Merced Fire Station 2 CD	12.31E	.02	.00	.00	.53	.20	1.98	1.80	2.95E	1.93	2.38	.46	.06
B0	5532-01	Merced SP	12.77	.00	.00	.00	.54	.22	2.01	1.33	3.52	1.82	2.90	.37	.06
B0	5532-03	Merced 5 SE	12.41	.00	.00	.00	.79	.13	2.21	1.87	2.64	1.73	2.66	.36	.02
B0	5534	Merced Fancher Ranch	12.27	.00	.00	.00	.82	.14	1.90	1.21	2.93	1.97	2.78	.45	.07
B0	5535	Merced 2 HPD	12.37	.02	.00	.03	.49	.19	1.92	1.79	2.96	1.76	2.76	.39	.06
B8	5550	Mercey Hot Springs CD	M	.00	.00	.00	.15	.00	1.54	1.40	1.85	–	–	–	–
C3	5669	Milo 5 NE HPD	31.50	.01	.00	.34	.76	.28	.13	11.45	5.05	4.60	7.27	1.04	.57
B7		Minarets RS	M	.13E	.18	1.00	1.60	.26	–	–	–	–	–	–	.63
C2	5680	Mineral King S	40.21					July 24, 1962 to July 26, 1963							
C2	5708	Miramonte Honor Camp	25.81	.00	.00	.09	1.30	.13	.13	8.20	3.95	4.26	6.93	.66	.16
C1	5723	Mitchell Meadow S	35.94					August 12, 1962 to July 23, 1963							
B4	5735	Moccasin	31.57	.03	.00	.14	2.65	.68	3.31	2.90	7.18	6.20	5.72	2.08	.68
B0	5738	Modesto CD	12.59	.00	.00	T	.59	.64	2.00	.99	2.68	2.39	2.97	.32	.01
B0	5740	Modesto KTRB	12.47	T	.00	.00	.66	.56	2.28	.64	3.02	2.28	2.67	.33	.03
B0	5741	Modesto 2 HPD	12.36	.00	.00	.02	.40	.64	2.18	.99	2.38	2.51	2.97	.24	.03
V8	5756	Mojave HPD CD	2.11	.00	.00	.00	.05	.00	T	.08	.83	.80	.27	.00	.08
V8	5758	Mojave 2 ESE CD	M										RB	.00	.25
C5	5777	Monache Meadows S	20.05				September 23, 1962 to September 25, 1963								
C0		Moody Ranch	M										RB	.55	.25
C1	5893	Mountain Rest FS	35.65	.03	.00	.17	2.03	.06	.42	11.40	7.23	5.08	8.04	1.17	.02
V8	6122	Neenach CD	5.65	.00	.00	.00	.02	.00	.00	.02	1.92	2.32	.88	.00	.49
B0	6168	Newman 2 NW CD	13.89	.00	.00	.00	.13	.13	1.54	3.18	3.63	1.95	3.13	.05	.15
B0	6168-01	Newman 1 SE	14.81	.00	.00	.00	.79	.13	2.21	3.22	3.46	1.96	2.90	.14	.08
C0	6230-50	North Belridge	4.19	.00	.00	.00	.09	.00	.02	.18	1.70	.20	.75	.91	.34
B7	6252	North Fork Ranger Sta CD	34.88	.34	.19	.02	1.94	.33	.69	8.81	8.39	5.61	7.02	1.47	.07
B0	6303	Oakdale	16.62	.03	.00	.02	1.10	.51	2.34	.89	4.12	2.89	4.26	.38	.08
B0	6305	Oakdale Woodward Dam CD	14.11	T	.00	.04	1.35	.64	1.44	.70	2.82	2.87	3.78	.35	.12
B6		Oakhurst	30.65	.06	.02	.22	1.60	.24	1.20	7.79	7.10	4.88	6.35	1.09	.10
C0	6393	Oilfields FFS	7.13	.00	.00	.00	.10	.00	1.25	1.95	1.88	.72	.90	.33	.00
C7	6395	Oilfields Joaquin Ridge S	12.69E	October 3, 1962 to February 28, 1963							R	1.65	1.02E	.28E	.08E
C5		Onyx	6.67	.00	.00	.08	T	.00	.00	1.42	1.91	1.73	.89	.10	.54
C2	6476	Orange Cove CD	12.16E	.00	.00	.17	.63	.04	.03	2.99	2.20E	2.29	3.39	.29	.13
B0	6490	Orestimba	13.18	.00	.00	.00	.14	.13	1.44	2.00	4.21	1.83	3.04	.10	.29
B5	6552	Ostrander Lake S	54.05					July 19, 1962 to September 3, 1963							
B8	6583	Pacheco Pass HPD	16.10	.00	.00	.00	.83	.10	1.27	6.18	2.32	2.24	2.66	.32	.18
C0	6651	Paloma Ranch	4.00	.00	.00	.00	.03	.00	.00	.00	1.06	1.32	1.41	.00	.18
B8	6675	Panoche CD	8.20	.00	.00	T	.14	.01	1.62	1.70	1.80	1.59	.67	.33	.34
B8	6676	Panoche 2 W	8.20	.00	.00	.30	.00	.04	1.55	1.85	2.02	1.04	1.40	.00	.00
B0	6677	Panoche Creek CD	M							RB	2.84	.86	1.11	.18	.23
B0	6679-05	Panoche Water District	7.59	.00	.00	.00	.15	.10	1.32	.91	2.86	.96	1.06	.14	.09
B4	6688	Paradise Meadow S	56.74				September 16, 1962 to September 14, 1963								
D3	6703	Parkfield CD	16.44	.00	.00	.00	.67	.00	1.60	2.19	5.91	3.09	2.51	.47	T
D3	6706	Parkfield 7 NNW HPD	16.61	.00	.00	.00	.82	.00	2.77	4.25	3.48	2.14	2.50	.63	.02
B0	6746-01	Patterson	12.54E	.00E	.00E	.00E	.41	.22	1.79	2.18	3.49	1.75	2.44	.17	.09
C6	6754	Pattiway CD	6.69	.00	.00	.00	.39	.04	T	T	2.29	1.11	1.85	.65	.36
C2	6767	Pear Lake S	44.91				August 13, 1962 to August 26, 1963								
B8	6847	Pfeiffer Ranch	19.57E	.00E	.00E	T	1.31	.23	1.85	3.03	3.66	3.74	4.91	.58	.26
C1	6857	Piedra CD	16.14	.05	.00	.04	.85	.05	.11	3.54	3.99	2.79	4.28	.37	.07
B3	6893	Pinecrest Strawberry	52.02	.10	.10	.10	3.79	.98	3.26	10.84	6.28	8.11	10.38	5.11	2.97
C1	6895	Pine Flat Dam (R)	18.83	.01	T	.06	1.32	.05	.19	4.06	4.57	3.49	4.53	.47	.08
C1	6902	Pinehurst	26.67	.00	.00	.22	1.45	.30	.09	7.85	5.01	4.05	5.69	1.56	.45
B7		Placer GS	M	.07	.06	.70	1.55	.30	.74M	–	–	–	4.69	2.00	.58
C0		Pond 1 N	6.78	.00	.00	.10	.14	T	.06	.33	1.53	1.42	1.55	.69	.96
C0	7077	Porterville CD	8.99	.00	.00	.07	.30	.00	T	.66	2.42	2.21	2.70	.17	.46
C0	7079	Porterville 3 W	8.10	.00	.00	.09	.30	.00	T	.45	2.21	2.15	2.41	.12	.37
C5	7093	Portuguese Meadow S	42.22					July 26, 1962 to July 8, 1963							
C4	7096	Posey 3 E CD	28.74	.00	.00	.22	.93	.00	.03	3.97	8.77	4.34	7.69	1.30	1.49
C0	7098-11	Poso Ranch	7.93	.00	.00	.06	.10	.00	.00	.21	2.11	1.56	1.75	1.19	.95
B0	7099-11	Poso Canal Co. Hdq.	B.63	.00	.00	.00	.38	.08	1.22	.72	2.85	1.66	1.46	.26	T
B4	7145	Priest	31.38E	.07	.01	.00	2.59	.75	3.38	3.72	7.02E	5.56	5.92	2.12	.24
D2	7150	Priest Valley CD	22.09	.00	.00	T	1.43	.05	2.99	4.42	4.54	4.36	3.59	.56	.15
C5	7179	Quaking Aspen S	46.36					July 25, 1962 to July 10, 1963							
C1	7259	Rattlesnake Creek S	45.51				July 10, 1962 to August 7, 1963								
B6	7270-01	Raymond 3 SSW	16.44	.10	.00	.00	.90	.00	1.80	1.20	4.00	2.65	5.19	.60	.00
B6	7272-01	Raymond 10 N	27.76	.10	.00	.00	2.01	.40	2.20	5.30	6.13	4.71	5.98	.93	.00
B6	7273	Raymond 9 N CD (P)	26.67	.20	.00	.05	1.95	.17	2.02	6.26	3.89	5.15	6.06	.81	.11

TABLE A-2

MONTHLY PRECIPITATION (Continued)

(In inches)

Drainage Basin	Alpha Order Number	Station Name	Seasonal Total	196- July	Aug.	Sept.	Oct.	Nov.	Dec.	[illegible] Jan.	Feb.	Mar.	Apr.	May	June
B6	7276	Raymond 12 NNE	26.58	.22	.00	.02	1.80	.42	1.26	8.15	2.81	4.52	6.23	1.10	.05
C0	7288	Rector b	9.33	T	.00	.05	.34	.00	.22	1.73	1.53	1.99	3.07	.18	.22
C0		Reedley MVFD	10.89	.00	.00	.08	.42	.02	.18	1.78	2.68	2.05	3.34	.17	.17
B0		Ripon	M										RB	.00	.04
C0	7460	Riverdale	6.98	.00	.00	.00	.20	T	.34	.91	1.73	1.12	1.88	.75	.05
V2	7510	Rock Creek S	25.81				October 15, 1962 to November 4, 1963								
B6	7528	Rocky Village	22.70	.01	.00	.03	1.60	.30	3.04	4.00	2.85	3.74	6.20	.91	.02
C0	7555	Rosedale	4.89	.00	.00	.10	.22	.00	.00	.12	1.06	1.03	1.51	.47	.38
B7	7560	Rose Marie Meadow S	43.81					July 3, 1962 to July 17, 1963							
C5	7579	Round Meadow S	37.42					July 26, 1962 to July 9, 1963							
B4	7623	Saches Springs S	58.03				September 25, 1962 to September 20, 1963								
D1	7719	San Benito HPD	14.48	.00	.00	.00	.56	.00	2.25	3.28	1.89	3.42	2.39	.35	.34
Z2	7735	Sandberg WB RCD	5.56	.00	.00	.00	.10	.00	T	.07	2.25	1.58	1.00	.02	.54
C0	7753	San Emigdio Ranch CD	7.82	.00	.00	T	.55	.00	.00	.02	2.29	1.72	2.20	1.04	T
D1	7755	San Felipe Highway Sta HPD	21.20	.00	.00	.00	1.67	.28	1.68	6.16	2.89	3.29	4.75	.37	.11
C0	7800-02	Sanger 1 NE	13.15	.04	.00	.06	.72	.01	.38	2.60	2.89	2.46	3.66	.20	.13
C0	7800-03	Sanger RS	10.78	.00	.00	.12	.00	.00	.35	2.51	2.10	2.03	3.34	.23	.10
C0	7816	San Joaquin	6.31E	.00E	.00E	.00E	.00E	.00E	1.37	.79	1.77	.76	1.53	.09	.00E
C0		San Joaquin MVFD	5.86	.00	.00	.00	.15	.00	.53	.50	2.28	.90	1.38	.12	.00
B7	7817	San Joaquin Exp Range HPD	19.74	.05	.00	.13	1.49	.11	1.25	4.67	2.85	4.04	4.56	.51	.08
B0	7836-01	San Juan Hdqrs M & L	9.56	.00	.00	.00	.40	.12	1.32	.75	3.27	1.28	1.65	.52	.25
B8	7846	San Luis Dam CD	M							RB	3.28	1.80	2.58	.32	.12
B0	7855	San Luis Canal Co Hdq	10.35	.00	.00	T	.41	.14	1.13	.96	3.80	1.38	1.51	.76	.26
D7	8259-02	Simmler R. W. Cooper	8.26	.00	.00	.00	.32	.00	.13	.65	2.85	1.81	1.74	.48	.28
D7	8259-04	Simmler Maint. Sta	6.81	.00	.00	.00	.28	.00	.15	.35	2.53	1.51	1.48	.41	.10
D2	8276	Slack Canyon HPD	18.29	.00	.00	.00	.87	.03	2.86	3.75	4.33	2.86	2.81	.66	.12
C6	8304	Smith Flat Ss	3.85					September 15, 1962 to June 30, 1963							
B5	8318	Snow Flat S	55.42					June 25, 1962 to July 16, 1963							
C1	8323-01	Soaproot Saddle	37.27E	.00	.00	.00	2.20	.00	.00	16.50	6.98E	4.49	6.50E	.60E	.00
D7	8326	Soda Lake	6.76	.00	.00	.00	.27	.00	T	1.20	1.91	1.35	1.24	.74	.05
B4	8353	Sonora CD	33.31	.06	.00	.01	2.94	.93	2.97	3.99	7.75	5.97	6.79	1.43	.47
G9	8355	Sonora Junction HPD	M	.19	.48	.60	1.53	.18	.61	–	–	2.47	1.00	2.76	1.34
C0	8375-50	South Belridge	3.39	.00	.00	.00	.11	.00	T	.07	1.33	.30	.70	.38	.50
B0	8378	South Dos Palos	9.26	.00	.00	.00	.27	.08	1.56	1.08	3.06	1.23	1.45	.22	.31
B5	8380	So Entrance Yosemite NP CD	55.13	.27	.05	.33	2.69	.46	2.18	17.72	9.93	6.91	10.72	2.99	.88
V2	8406	South Lake S	25.74					June 30, 1962 to June 30, 1963							
C0	8407-11	South Lake Farms Hdq	6.59	.00	.00	.00	.06	.00	.09	.46	2.06	.98	1.95	.39	.60
B3	8450	Spring Gap Forebay R	49.41	.50	.18	.17	4.33	*	V4.38	11.20	4.28	8.40	10.61	4.15	1.21
C3	8455	Springville 7 ENE CD	30.23	.00	.00	.12	1.06	.20	.05	4.13	10.16	4.67	8.24	1.26	.34
C3	8460	Springville RS	16.05	.00	.00	.28	.53	T	.04	3.41	3.43	3.18	4.57	.31	.30
C3	8463	Springville Tule Hdwrks HPD	M	.00	.00	.32	1.09	.16	.06	–	–	5.88	8.93	1.49	.65
C2		Squaw Valley	21.40	.00	.00	.18	1.45	.05	.16	6.73	3.37	3.87	5.29	.30	.00
B3	8499	Stanislaus Power Hse CD (P)	36.70	.10	.00	.30	4.07	.95	2.53	5.74	5.90	7.23	7.41	2.19	.28
C1	8510	State Lakes S	37.88					August 7, 1962 to August 22, 1963							
C0	8520	Stevenson Dist Sec 33	6.81	.00	.00	.02	.12	.00	.06	.41	1.97	1.41	1.93	.34	.55
C3	8620	Success Dam (R)	9.98	.11	.00	.07	.29	.00	.00	.81	2.83	2.33	2.92	.23	.39
C1	8643	Summit Meadow S	51.31					June 27, 1962 to July 15, 1963							
C7	8752	Taft HPD	M	.00	.00	.00	.27	.00	.00	.04	–	1.06	.64	1.36	.57
C7	8755	Taft KTKR Radio	4.58	T	.00	T	.10	.00	T	.01	.86	.99	.83	1.14	.65
C6	8826	Tehachapi CD	5.45	.00	.00	.06	.13	.00	T	.27	1.29	1.49	1.46	.09	.66
C6	8832	Tehachapi RS HPD	5.97	.00	.00	.03	.24	.00	.00	.27	1.78	1.43	1.46	.06	.70
C6	8839	Tejon Rancho CD	9.11	.00	.00	T	.88	T	T	.05	2.41	1.92	2.62	.81	.42
C2	8868	Terminus Dam R	13.36	T	.00	.14	.53	T	.04	2.05	3.21	2.95	4.09	.27	.08
C7		Thirty-Two Corral	11.57E	.00E	.00E	.00E	.00E	.00E	2.50	*	V5.40	1.75	1.45	.47	.00E
C2	8912	Three Rivers 6 SE HPD	19.82	.00	.00	.27	.73	.07	.05	5.24	2.33	3.52	6.42	.87	.32
C2	8914	Three Rivers Edison PH 2 CD	23.92	.01	.00	.17	.78	.03	.03	7.93	3.44	3.80	6.91	.77	.05
C2	8917	Three Rivers Edison PH 1 HPD	22.86	.01	.00	.22	.77	.08	.04	8.12	2.47	3.89	6.41	.76	.09
B0	8997	Tracy 2 SSE HPD	7.96	.00	.00	.00	.55	.33	1.15	.99	1.42	1.36	2.01	.15	.00
B8	8999	Tracy Carbona CD	8.80	.00	.00	.00	.65	.34	1.29	1.07	1.82	1.41	2.11	.11	T
C0	9006	Tranquillity Glotz	7.32	.00	.00	.00	.10	T	2.16	.43	1.91	1.12	1.21	.18	.21
C0		Traver 4 ESE	9.53	.00	.00	.30	.43	.01	.21	.95	2.27	2.08	3.00	.10	.18
C1	9025	Trimmer RS	24.48	.02	.00	.11	2.03	T	.08	7.28	6.76	1.78	5.92	.50	.00
C0	9051	Tulare b	8.83	.00	.00	.23	.33	.00	.10	1.32	1.54	2.09	2.90	.14	.18
C0	9051-04	Tulare Dist Sec 27	5.92	.00	.00	.00	.08	.00	.06	.38	2.07	.79	1.71	.71	.12
C0	9052	Tulefield CD	4.53	.00	.00	.00	.22	.00	.00	.02	1.33	1.31	1.05	.60	T
C3	9059	Tule River Intake b	30.23	.00	.00	.13	1.03	.22	.06	8.93	5.31	4.64	8.25	1.27	.39
C3	9060	Tule River PH b	18.07	.00	.00	.14	.63	.06	.04	3.60	3.93	3.42	5.42	.46	.37
C5	9061	Tunnel RS S	22.95				September 23, 1962 to September 25, 1963								
B3	9062	Tulloch Dam	22.26	.08	.00	.03	1.58	.91	2.48	1.47	5.74	3.63	5.20	.95	.19
B4	9063	Tuolumne Meadows S	35.33					June 25, 1962 to July 17, 1963							
B0	9073	Turlock CD	12.86	.00	.00	T	.20	.27	1.49	1.35	3.69	2.25	3.27	.32	.02
B0	9073-01	Turlock 5 SW	16.35E	.00E	.00E	T	.25	.30	1.30	4.42	3.68	2.80	3.15	.25	.20
B0	9073-02	Turlock 8 WSW	11.31E	.00E	.00E	.00E	.21	.20	1.43	1.29	3.00	1.90	2.88	.20	.20
C0	9145	U.S. Cotton Field Sta	6.50	.00	.00	.05	.04	.00	.02	.17	2.14	1.49	1.40	.56	.63
B7		Upper Chiquito S	M	.38	.06	.62	1.67	–	–	–	–	–	–	–	–
D1	9189	Upper Tres Pinos HPD	13.38	.00	.00	.00	.71	.16	2.19	2.29	2.13	3.30	2.30	.30	.00
B7	9301	Vermilion Valley S	29.13					June 20, 1962 to June 25, 1963							
C0	9304	Vestal b	7.18	.00	.00	.22	.21	.00	.00	.60	1.79	1.51*	1.79	.24	.82
C0	9367	Visalia CD	9.08	.00	.00	.02	.40	T	.05	.82	2.13	2.10	3.15	.22	.19
C0	9369	Visalia 4 E	9.83	.00	.00	.05	.36	T	.45	1.69	1.71	1.90	3.17	.18	.32
C0	9452	Wasco CD	7.15	.00	.00	.00	.09	.00	.00	.22	1.94	1.72	1.40	1.04	.74
B5	9482	Wawona RS HPD	M	–	.14	.21	2.05	.53	1.67	16.10	5.12	7.99	7.91	2.67	.44
C5	9512	Weldon 1 WSW HPD	5.77	.00	.00	.00	.00	.00	.00	2.09	.58	1.61	.51	.69	.29
C0	9535	West Camp SLF	6.02	.00	.00	.00	.07	.00	.03	.25	2.72	.94	1.50	.29	.22
B6		Westfall RS	58.21	.03	.04	.37	2.45	.62	2.23	15.53	16.91	7.95	9.62	2.29	.17
C0	9560	Westhaven CD	6.01	.00	.00	.00	.07	.00	.23	.52	2.56	.50	1.37	.55	.21
B0	9565	Westley	11.75	.00	.00	.00	.50	.33	1.81	2.09	2.90	1.87	1.96	.09	.20
C5	9602	Wet Meadow S	40.27					July 14, 1962 to August 28, 1963							
C0		Wilbur Ditch	7.20	.00	.00	.00	.00	.00	.04	.40	2.33	1.13	1.81	.47	1.02
C1	9749	Wishon Res b	48.98	.03	.00	.67	1.80	.30	.20	16.73	8.89	7.72	9.95	2.13	.56
C5	9754	Wofford Heights CD	8.66	.00	.00	.04	.02	.00	.00	2.91	1.99	2.12	1.05	.23	.30
C1	9773	Woodchuck Meadow S	48.29					July 12, 1962 to August 9, 1963							
C4	9805	Woody	10.38	.00	.00	.02	.58	.00	.00	.46	2.81	2.38	3.33	.54	.71
B5	9855	Yosemite National Pk HPD CD	39.76	.30	.13	.71	1.58	.85	1.23	10.06	6.50	7.76	7.09	2.73	.82

TABLE A-3

MONTHLY TEMPERATURES

Drainage Basin	Alpha Order *Number	Station Name		July	Aug	Sept.	Oct	Nov.	Dec.	Jan.	Feb.	Mar	Apr	May	June
B6	0049	Ahwahnee 2 NNW	Max	95	97	94	88	86	79	72	82	70	74	86	92
			Min	59	60	56	44	33	30	23	40	29	32	40	48
			Av Max	89.6	89.2	86.7	76.9	69.7	68.1	59.9	66.8	59.8	57.9	71.4	77.4
			Av Min	66.0	65.7	62.5	53.4	46.3	43.2	36.4	46.1	39.2	41.0	54.6	56.9
			Avg	77.8	77.4	74.6	65.2	58.0	55.6	48.2	56.4	49.5	49.4	63.0	67.1
C0	[illegible]396-[illegible]	Avenal Walden	Max	107	M	M	93	82	M	66	75	77	80	95	105
			Min	60	M	M	44	37	M	21	40	33	40	48	55
			Av Max	102.1	M	M	77.0M	68.5M	M	55.6M	66.2	66.4	69.6	81.0	90.5
			Av Min	66.3	M	M	52.0	45.5M	M	32.6M	50.0	44.9	48.9	58.8	63.0
			Avg	84.2	M	M	64.5M	57.0M	M	44.1M	58.1	55.6	59.2	69.9	76.7
B5	0430	Bagby	Max	106	106	102	96	86	78	65	78	70	76	RE	
			Min	58	54	52	42	31	28	22	38	32	34	RE	
			Av Max	99.7	98.9	95.7	80.0	70.2	61.2	57.2	69.5	62.3	60.9	RE	
			Av Min	62.9	61.5	57.9	48.8	41.5	37.6	31.5	45.8	38.6	40.3	RE	
			Avg	81.3	80.2	76.8	64.4	55.9	49.4	44.4	57.6	50.4	50.6	RE	
C0	155[illegible]	Caruthers 4 E	Max		RB	99M	91	M	77	63	77	85	82	99	108
			Min		RB	46M	40	M	20	17	37	31	33	41	46
			Av Max		RB	90.4M	77.8	M	59.3	54.4	69.0	69.4	66.0	87.0	92.8M
			Av Min		RB	51.6M	47.1	M	34.5	28.3	44.6	39.0	39.3	52.1	55.3M
			Avg		RB	71.0M	62.5	M	46.9	41.4	56.8	54.2	52.6	69.6	74.0M
B0	1580	Castle AFB	Max	106	103	97	90	78	69	63	69	74	74	94	101
			Min	56	53	50	41	30	25	22	40	33	34	42	50
			Av Max	96.2	91.4	86.2	74.0	66.6	54.2	50.8	64.1	62.4	62.5	75.8	84.3
			Av Min	63.5	61.0	56.8	50.1	41.2	37.8	31.2	47.6	41.1	44.1	52.4	56.1
			Avg	79.8	76.2	71.5	62.0	53.9	46.0	41.0	55.8	51.8	53.3	64.1	70.2
B8	1583	Castle Rock Rad Lab	Max	104	104	99	91	80	70	65	76	76	77	96	104
			Min	54	53	46	40	33	21	18	36	32	33	38	50
			Av Max	97.0	93.3	88.6	76.1	69.9	57.7	54.2	67.2	64.8	65.3	77.8	86.7
			Av Min	61.4	61.2	56.5	50.3	43.6	34.7	27.9	47.2	40.9	44.1	52.6	57.7
			Avg	79.2	77.2	72.6	63.2	56.8	46.2	41.0	57.2	52.8	54.7	65.2	72.2
B6	1590	Cathay Sawyer Ranch	Max	101	103	98	90	80	72	65	74	72	71	86	99
			Min	54	52	50	43	28	22	21	37	30	30	37	43
			Av Max	95.3	93.5	88.5	73.4	64.5	58.2	52.2	62.9	59.0	59.9	72.4	82.2
			Av Min	61.9	60.6	57.1	50.0	40.9	37.8	30.3	44.7	38.0	40.2	51.0	53.3
			Avg	78.6	77.0	72.8	61.7	50.7	48.0	41.2	53.8	48.5	50.0	61.7	67.7
B6	1591	Cathay Stonehouse	Max	101	102	97	90	80	74	64	75	73	73	87	97
			Min	50	45	45	38	24	20	16	31	25	25	34	38
			Av Max	94.6	93.5	89.0	71.8	65.4	58.6	53.2	63.9	60.4	61.6	74.5	83.6
			Av Min	55.8	55.1	51.6	46.1	37.0	33.7	26.4	41.2	34.3	38.7	48.5	49.0
			Avg	75.2	74.3	70.3	59.0	51.2	46.2	39.8	52.6	47.4	50.2	61.5	66.3
B4	1904	Cold Springs	Max	M	M	M	80	76	67	62	M	63	60	82	80
			Min	M	M	M	29	21	16	12	M	16	13	28	32
			Av Max	M	M	M	66.7	60.3	52.7	45.2	M	46.5	44.0M	60.6	67.4
			Av Min	M	M	M	40.2	34.9	31.9	26.3	M	26.0	27.7M	39.2	42.9
			Avg	M	M	M	53.5	47.6	42.3	35.8	M	36.2	35.8M	49.9	55.6
C0	2013	Corcoran El Rico 1	Max	102	102	102	91	84	74	66	72	80	80	96	106
			Min	51	46	46	37	24	19	17	38	30	31	38	46
			Av Max	96.4	93.6	88.8	76.0	70.2	60.6M	55.1	67.6	66.6	68.5	81.7	88.7
			Av Min	56.2	55.6	52.0	45.3	38.9	35.1M	28.7	46.6	39.5	43.2	51.3	54.6
			Avg	76.3	74.6	70.4	60.6	54.6	47.8M	41.9	57.1	53.0	55.8	66.5	71.6
B5	20[illegible]2	Coulterville FFS	Max	109	100	95	89	81	72	63	72	70	72	86	98
			Min	56	55	52	41	30	26	25	34	32	M	M	44
			Av Max	94.4	91.8	86.8	72.2	65.1M	M	M	M	M	M	M	82.6M
			Av Min	64.2	62.7	58.9	49.5	43.3M	M	M	M	M	M	M	52.9
			Avg	79.3	77.2	72.8	60.8	54.2M	M	M	M	M	M	M	67.7M
B7	2122	Crane Valley PH	Max	97	99	92	88	82	72	66	78	66	70	84	93
			Min	58	56	52	40	30	16	20	36	30	30	40	30
			Av Max	90.0	89.3	85.7	73.5	64.1	60.5	55.1	62.3	56.3	54.9	70.0M	78.2
			Av Min	63.4	63.0	58.4	49.3	41.7	37.8	31.4	41.9	36.8	38.8	50.6M	52.6
			Avg	76.7	76.2	72.0	61.4	52.9	49.2	43.2	52.1	46.6	46.8	60.3M	65.4
C6	2222	Cummings Valley	Max	94	99	96	92	80	74	66	76	70	76	86	90
			Min	42	37	31	26	14	10	8	26	20	20	28	34
			Av Max	87.2	88.0	85.4	74.3	66.0	61.5	57.4	63.6	56.4	56.0	70.0	72.9
			Av Min	45.9	44.8	40.3	33.3	27.3	29.3	23.6	37.9	30.2	31.0	40.0	43.9
			Avg	66.6	66.4	62.9	53.8	46.7	45.4	40.5	50.8	43.3	43.5	55.0	58.4
B8	2369	Del Puerto Road Camp	Max	106	100	94	88	82	70	64	72	70	76	90	106
			Min	52	50	48	38	30	24	18	36	30	30	38	44
			Av Max	97.3	92.2	86.0	72.8	66.5	58.7	54.1	60.8	63.6	62.5	78.1	88.2
			Av Min	59.7	57.8	53.5	47.2	40.7	36.7	29.1	40.4	39.3	40.5	48.6	53.7
			Avg	78.5	75.0	69.8	60.0	53.6	47.7	41.6	50.6	51.4	51.5	63.4	70.9
C0	2436	Di Giorgio	Max	106	107	104	98	87	78	71	80	81	83	100	105
			Min	56	54	48	42	30	23	21	40	40	40	44	52
			Av Max	99.8	97.3	92.9	80.6	70.6	63.3	59.0	70.1	70.6	70.4	83.9	88.0
			Av Min	60.8	59.5	55.0	47.9	41.1	35.8	33.5	49.6	45.8	48.4	57.6	60.6
			Avg	80.3	78.4	74.0	64.2	55.8	49.6	46.2	59.8	58.2	59.4	70.7	74.3
C7	2464	Domengine Ranch	Max	101	102	101	92	82	72	65	80	75	78	97	101
			Min	57	54	52	40	39	34	25	43	36	36	45	39
			Av Max	96.5	94.2	87.5	74.8	66.9	57.6	53.0	65.1	63.2	65.4	79.4	86.6
			Av Min	69.1	66.0	64.0	53.0	50.3	44.4	37.0	50.6	43.8	45.3	53.7	59.2
			Avg	82.8	80.1	75.8	63.7	58.6	51.0	45.0	57.8	53.5	55.4	66.6	72.9
B4	2473	Don Pedro Reservoir	Max	105	104	99	97	86	70	65	75	75	76	93	104
			Min	53	56	50	42	30	27	23	37	31	31	39	43
			Av Max	97.5	95.3	90.6	77.7	69.3	59.2	54.5	66.5	62.6	63.6	77.1	86.9
			Av Min	63.7	61.7	57.3	50.2	42.5	38.1	30.2	42.9	37.7	41.8	49.7	53.1
			Avg	80.6	78.5	73.9	63.9	55.9	48.6	42.3	54.7	50.1	52.7	63.4	70.0
C0	3084	Five Points Diener	Max	103	102	101	91	84	71	65	73	80	80	96	104
			Min	58	52	52	43	26	22	21	41	33	34	42	50
			Av Max	98.5	94.7	89.9	76.3	68.0	57.0	54.1	65.7	66.2	68.5	81.5	88.1
			Av Min	62.5	61.7	57.7	50.7	43.0	37.5	31.4	47.6	41.0	44.5	52.9	57.6
			Avg	80.5	78.2	73.8	68.5	55.5	47.2	42.8	56.6	53.6	56.5	67.2	72.8
B6	3948	Midden Valley	Max	101	103	101	92	83	75	67	78	70	74	96	103
			Min	58	56	55	43	30	26	23	38	29	30	39	40
			Av Max	94.9	94.8	91.5	75.3	66.5	61.7	55.4	64.7	60.2	60.5	75.1	84.8
			Av Min	64.7	63.7	60.1	51.3	43.6	39.2	31.9	44.4	38.0	40.6	52.3	54.1
			Avg	79.8	79.2	75.8	63.3	55.1	50.4	43.7	54.6	49.1	50.6	63.7	69.4
B5	4103	Mornitos Giles Ranch	Max	101	100	96	90	82	74	62	72	74	72	88	98
			Min	54	54	52	44	28	28	22	40	32	32	40	46
			Av Max	94.3	92.2	87.8	73.2	65.9	57.6	52.0	63.1	60.2	61.4	73.9	83.0
			Av Min	65.3	63.3	59.8	52.4	44.6	40.3	32.8	47.1	40.4	42.7	51.1	54.7
			Avg	79.8	77.8	73.8	62.8	55.3	49.0	42.4	55.0	50.3	52.0	62.5	68.8

TABLE A-3

MONTHLY TEMPERATURES (Continued)

Drainage Basin	Alpha Order *Number	Station Name		July	Aug	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar	Apr.	May	June
B3	4170	Hunters Dam	Max	95	96	95	88	84	74	64	74	66	69	84	89
			Min	44	42	40	31	23	15	12	28	20	22	30	33
			Av Max	88.4	87.3	85.5	72.8	60.9	59.6	54.0	61.0	53.6	52.4	67.5	74.9
			Av Min	49.8	48.4	44.7	39.2	31.5	30.4	23.7	36.9	28.9	32.9	41.7	43.6
			Avg	69.1	67.8	65.1	56.0	46.2	45.0	38.8	48.9	41.2	42.6	54.6	59.2
C5	4303	Isabella Dam	Max	103	107	102	96	87	75	68	77	73	78	93	96
			Min	58	55	50	38	28	12	16	34	26	27	34	44
			Av Max	96.3	96.9	92.8	80.0	68.8	63.6	58.8	64.5	60.6	60.4	75.7	80.7
			Av Min	63.6	63.1	56.3	46.9	40.2	31.9	28.6	41.0	37.0	38.8	51.2	55.3
			Avg	80.0	80.0	74.6	63.5	54.5	47.8	43.7	52.8	48.8	49.6	63.4	68.0
C6	4463	Keene	Max	94	96	94	91	85	77	66	87	76	69	87	93
			Min	46	42	42	38	22	23	19	30	27	27	32	40
			Av Max	90.8M	89.3	83.8	70.8	63.0	64.3	57.0	65.5	61.0	59.3	73.1	79.8
			Av Min	55.0M	54.5	53.4	45.5	37.9	37.2	31.1	42.1	34.2	37.0	46.5	49.7
			Avg	72.9M	71.9	68.6	58.2	55.5	50.8	44.1	53.8	47.6	48.1	59.8	64.7
C5	4513	Kern Canyon	Max	99	98	98	91	76	73	71	78	73	76	92	98
			Min	60	60	51	46	M	24	22	41	34	34	43	53
			Av Max	95.4	-	89.7	74.4M	M	60.6M	M	65.1M	63.4M	64.2M	76.6M	83.8M
			Av Min	67.6	-	64.8	53.8M	M	39.1M	M	47.5M	42.5M	45.2M	55.3M	61.5M
			Avg	81.5	-	77.2	64.1M	M	49.9M	M	56.3M	53.0M	54.7M	65.9M	72.6M
C0	4535	Kettleman Hills	Max	101	101	98	89	81	72	64	78	74	76	93	102
			Min	60	56	54	49	39	33	24	44	37	38	48	52
			Av Max	95.5	93.3	88.1	73.4	65.2	58.0	51.7	63.2	62.7	63.8	78.1	85.1
			Av Min	70.4	68.6	65.7	56.5	50.7	45.3	37.9	50.6	45.5	46.0	56.6	62.4
			Avg	83.0	81.0	76.9	65.0	58.0	51.6	44.8	56.9	54.1	54.9	67.3	73.7
B0	4999-03	Livingston 5 W	Max	106	110	104	97	83	70	66	77	77	80	95	107
			Min	49	47	45	39	29	25	19	38	30	34	37	45
			Av Max	100.0	98.7	93.3	79.6	70.9M	56.2M	54.3M	66.7M	68.5M	66.4	81.8M	91.0M
			Av Min	55.7	54.3	48.4	46.4	37.5M	36.1M	27.9M	45.6M	38.3M	42.4	49.6M	52.3M
			Avg	77.8	76.5	70.9	63.0	54.2M	46.2M	41.1M	56.2M	53.4M	54.4	65.7M	71.6M
B0	5117	Los Banos Field Sta	Max	103	102	98	91	80	68	67	71	72	76	94	103
			Min	53	51	48	41	28	21	20	38	30	32	42	51
			Av Max	96.1	94.0	89.0	77.0	68.0	57.0	54.0	66.0	63.0	65.0	78.0	86.0
			Av Min	58.1	57.0	52.0	47.0	41.0	32.0	28.0	46.0	39.0	43.0	51.0	56.0
			Avg	77.1	75.5	70.5	62.0	54.5	44.5	41.0	56.0	51.0	54.0	64.5	71.0
B6	5202	Lushmeadows Rch	Max	92	M	88	M	M	M	66	76	72	74	M	M
			Min	56	M	54	M	M	M	23	37	27	29	M	M
			Av Max	85.5	M	M	M	M	M	54.2	62.6M	58.9M	56.8M	M	M
			Av Min	64.7	M	M	M	M	M	33.5	41.3M	35.5M	36.8M	M	M
			Avg	75.1	M	M	M	M	M	43.8	52.0M	47.2M	46.8M	M	M
C0	5257	Magunden	Max	107	106	102	93	85	78	68	78	83	81	97	106
			Min	46	60	46	44	31	19	18	41	37	38	44	52
			Av Max	101.9	98.6	92.8	78.8	66.1	62.1	58.0	69.4	68.1	69.6	83.7	89.6
			Av Min	63.9	65.3	59.9	51.8	41.2	35.5	29.8	48.6	43.8	46.8	57.2	61.0
			Avg	82.9	82.0	76.4	65.3	53.7	48.8	43.9	59.0	56.0	58.2	70.4	75.3
85	5348	Mariposa Circle 9 Rch	Max	104	104	93	84	80	70	64	73	65	74	93	100
			Min	48	44	42	33	23	19	16	30	18	21	30	34
			Av Max	98.4	94.0	86.8	71.3	58.3M	58.5	53.7	60.0M	54.5	53.4	70.8M	81.3
			Av Min	55.0	54.0	50.2	42.4	33.5M	32.3	27.5	37.2M	28.9	33.1	45.1M	45.5
			Avg	76.7	74.0	68.5	56.8	45.9M	45.4	40.6	48.6M	41.7	43.2	58.0M	63.4
B5	5352	Mariposa RS	Max	99	101	97	91	85	76	70	80	72	71	89	96
			Min	53	49	47	31	27	22	19	33	26	26	35	41
			Av Max	93.9	93.0	89.1	76.5	68.1	63.4	56.6	66.4M	61.6M	59.4	74.0M	81.4
			Av Min	58.4	56.6	53.3	45.5	38.7	34.4	27.1	40.1M	33.9M	36.5	49.0M	51.8
			Avg	76.2	74.8	71.2	61.0	53.4	48.9	41.8	53.2M	47.8M	48.0	65.1M	66.6
B7	5496	Meadow Lakes	Max					RB	73	64	75	62	66	84	86
			Min					RB	25	19	34	24	25	34	44
			Av Max					RB	58.8	51.7	58.6	52.0	47.7	64.4	73.0
			Av Min					RB	41.6	34.8	42.4	34.2	33.6	50.4	52.6
			Avg					RB	50.2	43.2	50.0	43.1	40.6	57.4	62.8
B7		Minarets	Max	90	94	90	86								84M
			Min	45	40	35	30								34M
			Av Max	84.3	85.7	81.2	71.4			Closed for winter season					71.6M
			Av Min	51.9	47.7	44.8	40.7								43.9M
			Avg	68.1	66.7	63.0	56.1								57.7M
30	5740	Modesto KTRB	Max	104	99	95	92	82	67	63	73	77	78	95	101
			Min	50	51	50	43	31	25	20	37	31	34	38	49
			Av Max	95.7	91.4	87.2	74.7	68.4	53.8	52.4	67.7	66.6	67.9	79.0	86.8
			Av Min	56.0	57.1	53.3	49.4	41.3	39.2	30.7	46.7	40.5	44.8	51.3	54.4
			Avg	75.8	74.2	70.2	62.0	54.9	46.5	41.6	57.2	53.6	56.4	65.2	70.6
:1	5893	Mountain Rest FFS	Max	93	94	M	85	M	M	M	74	63	60	84	89
			Min	46	37	M	21	M	M	M	33	23	24	38	38
			Av Max	86.9	87.8	M	70.2	M	M	53.5M	60.1M	53.0M	50.7M	66.4M	75.0M
			Av Min	55.7	50.9	M	39.0	M	M	35.1M	42.3M	33.1M	33.4M	44.6M	47.9M
			Avg	71.3	69.4	M	54.6	M	M	44.3M	51.2M	43.0M	42.0M	55.5M	61.4M
:0	6230-50	North Belridge	Max	105	105	104	94	83	74	70	79	80	80	95	103
			Min	63	62	57	46	31	20	18	43	35	38	49	54
			Av Max	100.2	97.8	92.0	78.7	68.3	59.3	55.9	67.1	67.2	67.7M	80.8	87.0
			Av Min	69.4	67.7	62.3	53.1	44.6	38.2	31.7	47.7	42.8	46.2M	57.8	62.6
			Avg	84.8	82.8	77.2	65.9	56.4	48.8	43.8	57.4	55.0	57.0M	69.3	74.8
36		Oakhurst	Max	97	99	97	89	82	77	66	82	70	74	88	94
			Min	43	35	36	30	20	13	9	24	18	21	26	30
			Av Max	91.5	90.7	86.2	74.3	66.6	62.0	55.4	64.5	58.3	58.4	71.5	77.1
			Av Min	48.2	46.1	42.6	36.8	29.4	26.1	18.8	34.2	28.2	33.0	43.1	41.2
			Avg	69.8	68.4	64.4	55.6	48.0	44.0	37.1	49.3	43.2	45.7	57.3	59.1
33	6893	Pinecrest Strawberry	Max	86	88	84	80	82	68	68	70	60	64	80	84
			Min	42	38	38	26	20	12	8	24	12	12	24	32
			Av Max	81.2	80.3	76.5	68.3	59.9	54.6	53.5	56.4	49.4	46.2	63.8	67.5
			Av Min	48.3	48.1	44.1	37.2	31.9	27.9	23.4	31.8	25.0	26.5	36.6	39.3
			Avg	64.8	64.2	60.3	52.8	45.9	41.2	38.4	44.1	37.2	36.4	50.2	53.4
:1	6895	Pine Flat Dam	Max	106	106	102	94	84	77	69	81	77	75	94	104
			Min	57	51	49	42	28	21	18	41	32	33	40	45
			Av Max	100.2	98.6	93.5	78.2	69.4	62.0	56.7	67.0	64.6	64.9	79.6	88.6
			Av Min	61.8	59.8	56.9	48.9	40.6	34.6	27.6	45.8	40.7	43.8	52.5	56.1
			Avg	81.0	79.2	75.2	63.6	55.0	48.3	42.2	56.4	52.6	54.3	66.0	72.3
:1	6902	Pinehurst	Max	90	93	90	84	79	70	62	75	62	67	80	85
			Min	52	54	47	37	28	23	15	32	22	23	33	39
			Av Max	85.1	85.6	81.7	70.0M	M	M	53.6M	M	M	52.4M	64.5M	72.4M
			Av Min	60.7	60.6	56.6	48.8M	M	M	31.8M	M	M	32.8M	47.9M	50.8
			Avg	72.9	73.1	69.2	59.4M	M	M	42.7M	M	M	42.6M	56.2M	61.6M

TABLE A-3

MONTHLY TEMPERATURES (Continued)

Drainage Basin	Alpha Order *Number	Station Name		[illegible]						196[illegible]					
				July	Aug	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar	Apr.	May	June
B7		Placer GS	Max	94	100	96	88								90 M
			Min	44	38	36	30								34 M
			Av Max	89.9	90.7	88.5	76.1			Closed for winter season					76.1M
			Av Min	48.6	46.9	43.9	36.7								43.3M
			Avg	69.2	68.8	66.2	56.4								59.7M
B6	[illegible]	Raymond 9 N	Max	104	104	99	88	84	76	66	79	73	75	90	100
			Min	54	49	48	38	25	21	19	36	40	27	36	40
			Av Max	97.3	96.1	91.1	76.2	68.7	61.6	56.4	67.4	62.4	63.1	76.4	86.4M
			Av Min	59.5	57.5	54.4	46.8	37.6	33.0	27.3	42.0	34.1	39.5	49.9	48.0M
			Avg	78.4	76.8	72.8	61.5	53.2	47.3	41.8	54.7	48.2	51.3	63.1	67.2M
C0	7268	Rector	Max	103	102	100	92	82	75	66	78	78	80	96	104
			Min	50	50	49	41	28	20	18	38	31	36	44	47
			Av Max	97.7	95.9	91.7	78.5	69.4	59.9	56.4	67.0	66.0	67.2	82.4	87.8
			Av Min	60.5	59.3	54.5	47.4	39.4	33.6	28.0	46.4	40.3	45.5	54.7	57.1
			Avg	79.1	77.6	73.1	63.0	54.4	46.8	42.2	56.7	53.1	56.4	69.4	72.4
C0	7360	Riverdale	Max	104	105	100	90	86	75	68	75	79	80	96	105
			Min	55	53	45	42	27	19	15	33	33	34	41	46
			Av Max	98.9	96.2	92.2	78.4	70.6	59.1	56.7	67.0	67.6	68.1	81.2	89.1
			Av Min	60.0	59.5	53.6	47.5	38.7	33.7	28.1	43.9	39.9	43.2	52.3	55.9
			Avg	79.4	77.8	72.9	63.0	54.7	46.4	42.4	55.4	53.7	55.6	66.7	72.5
C0	7800-02	Sanger 1 NE	Max	103	105	101	91	81	73	65	77	78	80	97	102
			Min	57	52	49	43	29	24	20	41	35	36	44	48
			Av Max	98.6	96.6	92.4	76.0	66.8	59.2	56.2	66.6	66.6	65.2	81.3	88.2
			Av Min	59.6	58.4	54.9	49.5	41.7	37.0	30.4	48.1	42.2	46.5	54.6	57.0
			Avg	79.1	77.5	73.6	62.8	54.3	48.1	43.3	57.4	54.4	55.8	67.9	72.6
C0	8375-50	South Belridge	Max	105	105	103	92	84	74	71	80	78	81	96	104
			Min	61	58	52	43	28	16	13	37	31	31	44	50
			Av Max	99.7	97.5	92.1	77.7	68.7	59.4	56.5	67.2	67.4	70.8	81.7	85.9
			Av Min	66.1	64.0	58.5	49.9	40.7	34.5	27.6	43.6	39.6	43.5	54.2	55.8
			Avg	82.9	80.8	75.3	63.8	54.7	47.0	42.1	55.4	53.5	57.2	67.9	70.8
C0	8407-11	South Lake Farms Hdq	Max	104	105	101	92	83	72	67	73	79	78	95	104
			Min	55	49	48	40	24	13	10	38	31	29	37	47
			Av Max	99.1	96.6	91.1	77.7	69.1	59.1	55.9	65.7	65.8	68.2	81.6	87.8
			Av Min	60.5	59.3	55.1	47.7	38.1	32.6	25.5	46.2	38.2	42.0	52.1	56.3
			Avg	79.8	78.0	73.1	62.7	53.6	45.8	40.7	56.0	52.0	55.1	66.8	72.0
B3	8450	Spring Gap Forebay	Max	88	90	86	82	72	68	58	68	60	64	78	82
			Min	42	40	40	28	24	20	9	42	12	16	24	32
			Av Max	M	83.1	M	65.4M	M	M	M	M	47.6M	46.7M	62.3M	M
			Av Min	M	48.9	M	38.7M	M	M	M	M	24.0M	27.4M	38.1M	M
			Avg	M	66.0	M	52.0M	M	M	M	M	35.8M	37.0M	50.2M	M
B3	8499	Stanislaus Power House	Max	102	105	100	95	86	74	M	79	72	74	92	96
			Min	52	47	42	35	25	20	M	30	24	26	33	42
			Av Max	97.7	96.3	92.9	77.8	67.7	60.7	M	66.4M	61.9	60.2	75.0M	82.2
			Av Min	58.5	56.1	52.6	45.1	38.3	33.8	M	39.7M	32.4	37.0	46.7M	50.3
			Avg	78.1	76.2	72.8	61.4	53.0	47.2	M	53.0M	47.1	48.6	60.8M	66.2
C3	8620	Success Dam	Max	103	103	100	94	84	75	67	79	78	77	97	103
			Min	59	56	52	45	33	23	23	43	36	36	42	47
			Av Max	97.8	95.7	91.4	78.3	69.3	62.3	57.5	67.2	65.8	65.7	81.3	86.8
			Av Min	64.2	63.6	60.6	53.1	45.6	37.9	31.9	48.2	43.4	45.8	54.6	58.6
			Avg	81.0	79.6	76.0	65.7	57.5	50.1	44.7	57.7	54.6	55.7	67.9	72.7
C7	8755	Taft KTKR Radio	Max	102	103	100	92	83	72	70	81	79	78	94	102
			Min	54	55	51	40	28	22	17	41	32	29	47	52
			Av Max	97.6	95.8	89.6	76.2	67.6M	60.0	55.3	66.5	65.2	63.2	79.6	85.9M
			Av Min	64.9	61.9	58.4	48.6	42.1M	34.2	30.2	46.6	42.4	43.1	55.0	59.9M
			Avg	81.2	78.8	74.0	62.4	54.9M	47.1	42.8	56.6	53.8	53.2	67.3	72.9M
C2	8868	Terminus Dam	Max	104	102	99	92	82	75	66	77	77	76	94	102
			Min	58	58	54	47	35	27	24	44	32	36	44	48
			Av Max	97.8	95.9	90.8	76.5	68.1	60.5	55.4	65.9	64.3	63.9	79.5	86.0
			Av Min	68.7	66.6	63.3	53.5	46.7	39.9	32.5	49.1	43.4	45.6	55.9	59.3
			Avg	83.2	81.2	77.0	65.0	57.4	50.2	44.0	57.5	53.8	54.7	67.7	72.6
C0	9006	Tranquillity Glotz	Max						RB	62	74	77	78	94	100
			Min						RB	14	35	28	28	42	49
			Av Max						RB	52.4	65.1	63.8	68.1	78.4	85.5
			Av Min						RB	24.8	43.6	36.8	40.9	51.1	56.1
			Avg						RB	38.6	54.4	50.3	54.5	64.7	70.8
C1	9025	Trimmer RS	Max	102	104	100	89	M	M	M	M	M	M	M	102
			Min	58	57	51	39	M	M	M	M	M	M	M	47
			Av Max	93.6	95.7	91.0	75.5	M	M	M	M	M	M	M	85.4
			Av Min	61.7	62.7	57.9	47.5	M	M	M	M	M	M	M	56.0
			Avg	77.6	79.2	74.4	61.5	M	M	M	M	M	M	M	70.7
C0	9051	Tulare	Max	107	107	103	95	89	74	70	81	80	84	100	108
			Min	60	56	51	43	30	22	18	34	34	35	46	51
			Av Max	102.6	100.3	95.7	82.1	72.5	61.1	59.3	68.8	69.0	71.0	85.4	91.4
			Av Min	63.5	61.5	58.1	51.0	42.4	36.5	30.1	47.1	42.8	46.3	56.4	59.6
			Avg	83.1	80.9	76.9	66.6	57.5	48.8	44.7	58.0	55.9	58.6	70.9	75.5
C[illegible]	9145	US Cotton Field Sta	Max	103	102	99	92	83	74	69	79	80	81	95	104
			Min	60	58	52	41	29	22	17	39	33	37	43	51
			Av Max	98.5	95.2	90.4	78.4	68.3	59.0	55.9	66.6	67.8	68.3	81.6	87.7
			Av Min	65.3	62.8	58.4	49.6	41.6	35.4	29.4	46.1	42.2	46.1	54.7	59.3
			Avg	81.9	79.0	74.4	64.0	55.0	47.2	42.7	56.4	55.0	57.2	68.1	73.5
C[illegible]	9304	Vestal	Max	104	105	100	92	83	75	69	79	79	80	98	104
			Min	60	58	54	41	27	18	15	43 M	38	36	43	52
			Av Max	99.2	96.7	91.2	78.8	69.8M	62.8M	58.4M	68.6M	63.6M	68.5M	84.1M	89.1M
			Av Min	67.2	65.4	61.1	52.8	43.0M	38.3M	30.8M	49.6M	40.6M	47.3M	58.2M	63.1M
			Avg	83.2	81.0	76.2	65.8	56.4M	50.6M	44.6M	59.1M	52.1M	57.9M	71.2M	76.1M
B0	9565	Westley	Max	101	100	97	92	81	68	62	75	72	77	94	100
			Min	50	49	47	41	30	24	20	36	32	32	37	47
			Av Max	96.6	93.2	M	77.7	M	M	52.9M	68.1M	65.6M	65.0M	77.9M	85.6M
			Av Min	55.0	54.8	M	48.7	M	M	29.2M	46.9M	40.0M	43.3M	48.8M	53.5M
			Avg	75.8	74.0	M	63.2	M	M	41.1M	57.5M	52.8M	54.2M	63.4M	69.5M
C1	9749	Wishon Res	Max	83	87	82	75	71	64	57	42	55	58	76	78
			Min	33	31	36	27	16	13	12	22	7	7	30	31
			Av Max	M	M	M	63.8M	55.2M	M	M	52.8M	42.9M	42.5M	60.6M	63.0M
			Av Min	M	M	M	36.1M	30.4M	M	M	30.8M	21.4M	22.0M	36.6M	40.3M
			Avg	M	M	M	50.0M	42.8M	M	M	41.8M	32.2M	32.2M	48.6M	51.6M
C4	9805	Woody	Max	100	101	97	92	82	74	65	79	74	72	93	101
			Min	53	51	43	38	23	22	17	37	30	29	34	35
			Av Max	95.8	93.9	88.6	74.5	66.0	62.5	56.7	64.4	61.9	60.6	76.8	84.4M
			Av Min	59.7	59.3	54.7	45.5	38.3	36.9	31.4	44.4	37.4	40.0	48.5	49.7M
			Avg	77.8	76.6	71.6	60.0	52.2	49.7	44.1	54.4	49.6	50.3	62.6	67.0M

TABLE A-4

MONTHLY SUMMARY OF EVAPORATION STATION DATA

Drainage Basin	Alpha Order Number	Station Name		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
CO	2013	Corcoran El Rico 1	Evap	[illegible]	[illegible]	8.96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.37E	3.97E	8.36	[illegible]
			Precip	.00	.00	.00	.06	.00	.09	.36	2.24	1.04	2.22	.21	.31
			Wind	1905	1865	1520	1640E	1265	1210	1308E	1462E	2045E	1780E	1840	1955E
			Av Max	96.4	93.6	88.8	76.0	70.2	60.6M	55.1	67.6	66.6	68.5	81.7	88.7
			Av Min	56.2	55.6	52.0	45.3	38.9	35.1M	28.7	46.6	39.5	43.2	51.3	54.6
C6	2222	Cummings Valley	Evap	[illegible]	11.25	8.66	5.60	3.40	2.92	4.62E	4.15	4.64	5.50	6.69	8.91
			Precip	.00	.00	.00	.33	.01	.00	.00	2.71	1.87	2.30	.40	.72
			Wind	2091	1986	1732	1580	1819	3256	[illegible]	2198	2900	2600	1950	1880
			Av Max	87.2	88.0	85.4	74.3	66.0	61.5	57.4	63.6	56.4	56.0	70.0	72.9
			Av Min	45.9	44.8	40.3	33.3	27.3	29.3	23.5	[illegible]	30.2	[illegible]	[illegible]	[illegible]
B4	24[illegible]3	Don Pedro Reservoir	Evap	15.10	13.13	9.82	6.20	2.81	2.46	1.72E	2.16E	4.44	4.09	6.91	10.79
			Precip	.16	.00	.05	1.68	.49	3.37	3.97	3.17	3.34	4.22	.94	.13
			Wind	–	–	–	–	–	–	–	–	–	–	–	–
			Av Max	97.5	95.3	90.6	77.7	69.3	59.2	54.5	66.5	62.6	63.6	77.1	86.9
			Av Min	63.7	61.7	57.3	50.2	42.5	38.1	30.2	42.9	[illegible]	41.8	49.7	53.1
C5	4303	Isabella Dam	Evap	13.29	12.63	9.41	5.66	3.09	2.68	2.82	2.58	4.55	4.25	8.23	10.50
			Precip	.00	.00	.00	.03	.00	.03	1.52	3.06	2.06	1.07	.13	.72
			Wind	1860	1881	1658	1592	1405	1439	1885	2075	2753	2713	2751	2413
			Av Max	96.3	96.9	92.8	80.0	68.8	63.6	58.8	64.5	60.6	60.4	75.7	80.7
			Av Min	63.6	63.1	56.3	46.9	40.2	31.9	28.6	41.0	37.0	38.8	51.2	55.3
BO	5117	Los Banos Field Sta	Evap	16.94	13.11	9.17	6.07	2.79	.85	1.25	2.14	4.33	5.58	10.25	13.62
			Precip	.00	.00	.00	.14	.12	1.67	2.13	2.42	1.28	1.69	0.22	.00
			Wind	3840	3398	2819	2252	1236	526	1235	1478	2784	2168	3447	5144
			Av Max	96.1	94.0	89.0	77.0	68.0	57.0	54.0	66.0	63.0	65.0	78.0	86.0
			Av Min	58.1	57.0	52.0	[illegible]	41.0	32.0	28.0	46.0	39.0	43.0	51.0	56.0
C1	6895	Pine Flat Dam	Evap	12.24	11.22	8.59	4.35	2.32	1.57	1.41	1.82	3.52	3.38	5.91	9.48
			Precip	.01	T	.06	1.32	.05	.19	4.06	4.57	3.49	4.53	.47	.08
			Wind	852	974	903	873	703	768	913	760	1020	809	511	831
			Av Max	100.2	98.6	93.5	78.2	69.4	62.0	56.7	67.0	64.6	64.9	79.6	88.6
			Av Min	61.8	59.8	56.9	48.9	40.6	34.6	27.6	45.8	40.7	43.8	52.5	56.1
B6	[illegible]	Raymond 9N	Evap	12.00	10.92	8.85	5.67	3.60	2.19	1.20	2.78	3.67	2.96	[illegible]	8.51
			Precip	.20	.00	.05	1.95	.17	2.02	6.26	3.89	5.15	6.06	.81	.11
			Wind	811	781	660	809	347	321	445	433	378	175	254	507
			Av Max	97.3	96.1	91.1	76.2	68.7	61.6	56.4	67.4	62.4	63.1	76.4	86.4
			Av Min	59.5	57.5	54.4	46.8	37.6	33.0	27.3	42.0	34.1	39.5	49.9	48.0
C3	8620	Success Dam	Evap	14.75	13.35	10.32	6.23	3.59	2.32	2.31	2.22	4.54	4.84	8.71	11.48
			Precip	.11	.00	.07	.29	.00	.00	.81	2.83	2.33	2.92	.23	.39
			Wind	1511	1644	1409	1544	1450	1487	1682	1210	1577	1026E	1600E	1731
			Av Max	97.8	95.7	91.4	78.3	69.3	62.3	57.5	67.2	65.8	65.7	81.3	86.8
			Av Min	64.2	63.6	60.6	53.1	45.6	37.9	31.9	48.2	43.4	45.8	54.6	58.6
C7	8755	Taft KTKR	Evap	16.02	14.04	10.17	5.83	3.58	2.40	2.52	3.23	5.79	6.25	10.14	13.16
			Precip	T	.00	T	.10	.00	T	.01	.86	.99	.83	1.14	.65
			Wind	1110	800	630	630	540	440	670	700	1420	1720	1380	1600
			Av Max	97.6	95.8	89.6	76.2	67.6M	60.0	55.3	66.5	65.2	63.2M	79.6	85.9M
			Av Min	64.9	61.9	58.4	48.6	42.1M	34.2	30.2	46.6	42.4	43.1M	55.0	59.9M
C2	8868	Terminus Dam	Evap		RB	9.08M	6.39	3.92	2.81	2.82	2.53	4.72	4.52	7.66	11.52
			Precip	T	.00	.14	.53	T	.04	2.05	3.21	2.95	4.09	.27	.08
			Wind		RB	1726M	2103	1950	2168	2398	1654	2100	1696	1032	1465
			Av Max	97.8	95.9	90.8	76.5	68.1	60.5	55.4	65.9	64.3	63.9	79.5	86.0
			Av Min	68.7	66.6	63.3	53.5	46.7	39.9	32.5	49.1	43.4	45.6	55.9	59.3
CO	9145	U. S. Cotton Field Sta.	Evap	13.87E	11.47	8.74E	5.23E	[illegible]	1.18E	2.03E	2.21E	5.57	6.07E	10.62E	11.90
			Precip	.00	.00	.05	.04	.00	.02	.17	2.14	1.49	1.40	.56	.63
			Wind	1263	1066	934	1074	886	904	1181	1211	2322E	[illegible]	3083	2089
			Av Max	98.5	95.2	90.4	78.4	68.3	59.0	55.9	66.6	67.8	68.3	81.6	87.7
			Av Min	65.3	62.8	58.4	49.6	41.6	35.4	29.4	46.1	42.2	46.1	54.7	59.3
BO	9565	Westley	Evap	9.50	6.93	5.28E	3.35E	1.86	.86E	.92E	1.86	3.62E	3.49E	6.57	8.97E
			Precip	.00	.00	.00	.50	.33	1.81	2.09	2.90	1.87	1.96	.09	.20
			Wind	–	–	–	–	–	–	–	–	–	–	–	–
			Av Max	96.6	93.2	M	77.7	M	M	52.9M	68.1M	65.6M	65.0M	77.9M	85.6M
			Av Min	55.0	54.8	M	48.7	M	M	29.2M	46.9M	40.0M	43.3M	48.8M	53.5M

APPENDIX B

SURFACE WATER FLOW

ALP

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SAN JOAQUIN RIVER BASIN

TULARE LAKE BASIN

INTRODUCTION

This appendix presents surface water data for the Water Year 1963 which is from October 1, 1962, to September 30, 1963. The data presented in this appendix consists of daily mean discharge, station locations, daily mean gage heights, and diversion quantities.

Stream gaging station descriptions presented show the historic maximum discharge of record and the maximum discharge for the report year. Locations of the gaging stations and other important data on the length of record and datum of gage are also presented.

Quantities of daily mean discharge for most stations shown are computed by an electronic computer. The gage height data are fed into the computer simultaneously with rating and shift correction data. Daily mean discharge, total monthly acre-feet, and instantaneous maximum and minimum discharge are computed. The gage height data are extracted from the standard recorder chart by a semiautomatic chart-reading machine and put into machine language. The record for those stations affected by backwater conditions is not adaptable to computation by machine methods and is computed manually by standard methods.

Daily mean stage tables are presented for key stations on the major streams in the San Joaquin Valley. These daily mean stages are computed by the electronic computer, as mentioned above. The gage heights are computed to the nearest one-hundredth of a foot, and the major crests for the year are shown.

Quantities of water diverted for use are shown as monthly total acre-feet and total acre-feet diverted for a certain reach of a stream.

Definition of Terms

A list of definition of terms as used herein follows:

Second-foot or cubic foot per second is the unit rate of discharge of water. It is a cubic foot of water passing a given point in one second.

Acre-foot is the quantity of water required to cover one acre to a depth of one foot. It is equivalent to 43,560 cubic feet or 325,850 gallons.

Drainage area of a stream above a specific location is that area, measured in a horizontal plane, which is enclosed by a drainage divide.

Unimpaired runoff is the flow that would occur naturally at a point in a stream if there were: (1) no upstream controls such as dams and reservoirs; (2) no artificial diversions or accretions; and (3) no changes in ground water storage resulting from development. Unimpaired flow is computed from measured runoff by allowing for man-made changes in natural conditions.

Water Year is the 12-month period from October 1 of any year through September 30 of the subsequent year and is designated by the calendar year in which it ends.

Surface Water Gaging Station Designation

The index number for each gaging station is composed of a number which begins with an alphabetical letter designating the hydrographic area, followed by the first digit which indicates the main river basin. The second digit refers to a tributary of the main river basin. The hydrographic area and the river basin are outlined on Plate B-1. The remaining three digits are used to number stations in an upstream direction with the lowest number at or near the mouth. The digit 9, which is the third from the left, indicates that the station is a surface gravity diversion station. Each station is listed by name as well as by machine index number.

EXPLANATION OF TABULAR DATA

The tabular data presented in this appendix are divided into the general categories of daily mean discharge, daily mean stage, and monthly diversions.

The area to which these data pertain is shown as Area 4 on page iii and on Plate B-1.

Table B-1 presents gaging station additions and discontinuations; it also presents revisions to previously published reports.

Lakes and Reservoirs

Three types of data are presented for lakes and reservoirs. Table B-2 presents inflow to Millerton Lake. Table B-3 presents the daily content of Millerton Lake in thousands of acre-feet. Table B-59 presents daily mean gage height of Tulare Lake.

Daily Mean Discharge

Presented in Tables B-4 through B-58 are records of daily mean discharge, gaging station location, period of record, maximum flow of record, maximum and minimum flow for the season, as well as the total flow in acre-feet for the 1962-63 water year.

The streamflow tables are arranged, for each stream or stream system, in downstream order. Stations on a tributary entering between two main stem stations are listed between those stations, and in downstream order on that tributary. A stream gaging station is named from the stream and the nearest post office (Merced River at Cressy) or well-known landmark (San Joaquin River at Fremont Ford Bridge).

Each stream gaging station has a stage-discharge relationship or rating developed. The rating gives the flow in second-feet for each gage height at the station. When flows at a single station occur in excess of 140 percent of the highest measurement on the rating, the computed daily mean discharges from the electronic computer are shown as estimated. Normally, the rating is fairly permanent where there is a fixed channel and a fixed flow regimen at the station. The rating varies, however, where the bed at the channel is of loose shifting sand, or where aquatic growth builds up in the channel changing the flow regimen.

Where the rating is not permanent and varies periodically, more frequent measurements of discharge are necessary to accurately determine the daily mean discharge.

All streamflow data reported herein are derived through the use of mechanical, arithmetical, and empirical operations and methods. Since the results are affected by inherent inaccuracies in the procedures and equipment used, it becomes necessary to establish limits of accuracy for which the data are reported. The following is a listing of significant figures used in reporting streamflow data:

1. Daily flows - second-feet

0.0 - 9.9	Tenths
10 - 99	2 significant figures
100 - up	3 significant figures

2. Means - second-feet

0.0 - 99.9	Tenths
100 - 999	3 significant figures
1000 - above	4 significant figures

The water year totals are reported to a maximum of four significant figures.

Daily Mean Gage Heights

Presented in Table B-59 through B-85 are records of daily mean gage heights for key stations on major streams in the San Joaquin Valley for the 1962-63 water year.

At the bottom of the stage tables are shown the major river crests occurring for the 1962-63 water year. The table also shows the location of the station, maximum gage height of record, period of record, and datum of gage. The elevation of water surface at the gaging station is obtained by adding the gage

height reading to the elevation of the gage datum presented in each table. Gage height for stage tables are computed from recorder charts and are reported to one-hundredth of a foot.

Of the 26 stations for which daily mean gage heights are presented in this report, 13 have computed daily mean discharge. These data are included in the streamflow tables.

Diversions

Presented in Tables B-86 through B-95 are the amounts of water diverted for irrigation during the period October 1, 1962 through September 30, 1963. The amounts of water diverted by pumping were determined by rating the capacity of each diversion pumping plant and collecting data on hours of operation. The amounts of water diverted by gravity (indicated by "Gravity" in column headed "Number and Size of Pump") were determined either by calibrating suitable measuring devices or by rating canals in a manner similar to that used to rate streamflow stations.

Because of the intermittent operation of most diversion facilities, the monthly diversion values are reported in acre-feet to three significant figures. The totals for individual water users and stream reaches are reported to four significant figures.

TABLE B-1

GAGING STATION
ADDITIONS AND DISCONTINUATIONS
AND
REVISIONS TO PREVIOUSLY PUBLISHED REPORTS

*ADDITIONAL STATIONS
- Delta Mendota Canal to Mendota Pool
- San Joaquin River below Friant
- Hubbs-Miner Ditch at Porterville
- Rhodes-Fine Ditch near Porterville
- Woods-Central Ditch near Porterville
- Poplar Ditch near Porterville
- Vandalia Ditch near Porterville
- Campbell-Moreland Ditch above Porterville
- Porter Slough Ditch at Porterville

DISCONTINUED STATIONS
- None

PUBLICATION DISCONTINUED
- Deer Creek near Terra Bella Irrigation District
- San Joaquin River at Whitehouse

REVISED DATA

		Maximum Discharge During Year	Maximum Discharge Of Record
Mariposa Creek near Cathay	1958		7180
	1959	2114	7180
	1960	1044	7180
	1961		7180
	1962	4620	7180
Maxwell Creek at Coulterville	1959		740
	1960	1720	1720
	1961		1720
	1962	1550	1720

*Installed prior to 1963.
Records not published in previous reports.

TABLE B-2

DAILY MEAN DISCHARGE

INFLOW TO MILLERTON LAKE

IN SECOND FEET

STATION NO	WATER YEAR
871121	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	1760	1270	648	557	13416	2054	3628	3963	6332	4099	2570	2651	1
2	1285	1527	731	874	4193	1492	3004	3966	6875	4263	2586	2554	2
3	1358	947	639	606	3688	1626	2752	3901	7399	4460	2623	3077	3
4	1365	785	593	578	3555	1437	2955	3864	5883	4213	2605	2830	4
5	1301	1061	578	577	3575	1627	3446	3893	5631	4052	2587	2875	5
6	1024	1566	519	340	3521	1632	3376	3809	5278	4427	2614	2827	6
7	1148	1611	477	330	3430	1631	3909	3948	4891	4607	2637	2445	7
8	1191	1453	566	388	3303	1395	3733	3914	4839	5017	2637	2367	8
9	1534	1453	538	435	3643	1430	3582	4630	5142	5332	2634	2674	9
10	1204	649	651	604	4419	1520	3522	3986	5145	5057	2683	2898	10
11	1178	298	644	577	3777	1364	3481	4046	4667	5008	2406	2797	11
12	1671	298	504	742	3507	1550	3513	3851	4420	5341	2667	2772	12
13	1246	688	587	637	3765	1624	3493	3827	4288	5447	2761	2844	13
14	1407	756	363	1166	3678	1669	4043	3885	4406	5294	2637	2469	14
15	913	787	593	507	3543	1582	4306	3737	5326	4969	2680	2515	15
16	1519	754	467	586	3524	1942	3841	3754	7352	4762	2812	2847	16
17	1227	502	686	994	3540	1871	4032	3793	7596	4693	2646	2848	17
18	1528	521	625	764	3528	1670	3818	3725	8209	4188	2523	3013	18
19	1534	1143	640	398	3496	1618	3772	3760	7543	3984	2635	3065	19
20	820	1341	542	82	3366	1769	4080	3713	7812	3564	2565	3019	20
21	760	1284	486	416	3469	1683	4435	3709	7265	3539	2793	2575	21
22	1421	887	599	473	3385	1769	4106	3641	6093	3617	2659	2540	22
23	1136	1008	532	317	3372	1828	4056	3785	5140	3482	2750	2946	23
24	1163	898	750	698	3399	1987	3882	3803	4680	3438	2728	2824	24
25	1628	730	76	442	3365	1824	3912	3790	4096	3455	2569	2455	25
26	1549	1006	488	317	3321	1787	4312	3745	4465	3397	2813	2421	26
27	961	703	711	201	3385	1983	4049	4215	5123	2488	2752	2549	27
28	387 a	671	683	360	3318	3489	3958 b	6739	5160	2688	2689	1865	28
29	1030	678	699	649		3798	3880	6862	4386	2583	2766	1253	29
30	1082	697	419	2211		2717	3863	6426	3620	2506	2479	1609	30
31	1131		569	11121		2618		6783		2640	2510		31
MEAN	1241	932	568	934	3910	1871	3758	4241	5635	4084	2646	2614	MEAN
MAX	1760	1611	750	11121	13416	3798	4435	6862	8209	5447	2813	3077	MAX
MIN	387	298	76	82	3318	1364	2752	3641	3620	2506	2406	1253	MIN.
AC.FT.	76318	55482	34915	57416	217152	115014	223287	260753	335330	251127	162676	155552	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *
a - 25 hr. day
b - 23 hr. day

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
2703											1945022

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.&R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 00 00	119 42 10	SW 5 11S 21E				OCT 41-DATE	OCT 41-DATE	1941		0.00	USCGS

Station located near center of Friant Dam on San Joaquin River, immediately above Cottonwood Creek, 0.9 mi. NE of Friant. Usable capacity, 503,000 ac.-ft. between elevations 375.4 and 578.0 ft. above mean sea level. Not available for release, 17,400 ac.-ft. Inflow to Friant Reservoir takes into account change in storage, release, spill, precipitation, and evaporation, and is representative of the natural flow which would pass the dam site if the dam had not been constructed. Figures shown under total discharge are computed inflow to the reservoir. Period of record for computed inflow is shown under period of record for discharge. Records furnished by U.S.B.R. Drainage area is 1,633 sq. mi.

TABLE B-3

STATION NO	WATER YEAR
871100	1963

DAILY CONTENT MILLERTON LAKE
(In thousands of acre-feet)

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	147.1	161.9	189.3	219.6	295.5	424.5	456.9	493.9	500.0	502.0	433.7	257.7	1
2	147.0	163.3	190.5	221.2	301.4	425.4	461.4	494.1	504.0	499.1	428.6	251.8	2
3	146.9	163.6	191.6	222.3	306.4	426.4	465.4	495.8	508.7	496.6	424.2	247.0	3
4	146.9	163.5	192.7	223.3	311.2	426.8	469.7	497.8	509.8	493.9	419.6	241.7	4
5	147.0	164.0	193.6	224.4	317.6	427.4	475.1	499.9	510.0	492.0	414.4	237.2	5
6	146.8	165.4	194.5	224.9	323.5	427.7	480.3	502.7	509.7	491.6	410.0	234.2	6
7	146.7	167.1	195.3	225.4	329.2	427.9	486.6	505.5	509.1	491.6	405.8	231.9	7
8	146.5	168.4	196.3	226.1	334.8	427.5	492.6	508.4	509.1	492.6	400.5	229.6	8
9	147.0	169.7	197.2	226.8	341.1	427.2	498.0	512.1	509.8	494.1	395.1	227.7	9
10	146.8	169.4	198.4	227.8	348.6	426.7	502.0	512.9	511.0	495.1	390.3	226.5	10
11	146.7	168.4	199.5	228.9	354.6	424.9	505.9	513.9	511.3	496.2	384.8	225.1	11
12	147.6	167.4	200.3	230.2	359.7	423.9	507.7	514.3	511.4	498.3	378.8	223.7	12
13	147.9	167.3	201.3	231.3	365.2	422.9	507.7	514.0	511.7	500.3	372.8	221.9	13
14	148.5	167.3	201.9	233.5	370.6	421.9	508.8	513.3	512.5	501.3	366.5	218.9	14
15	148.3	168.0	202.9	234.4	375.8	422.2	511.3	512.0	515.0	501.2	360.4	216.0	15
16	149.4	168.7	203.7	235.4	380.8	423.3	512.8	510.3	520.5	499.4	354.5	213.8	16
17	150.0	169.2	204.9	237.2	385.7	424.1	512.1	507.8	524.1	497.4	348.2	211.7	17
18	151.4	169.7	206.0	238.6	389.9	424.4	510.4	505.0	527.0	494.5	341.7	210.3	18
19	153.0	171.4	207.2	239.3	393.5	424.8	508.4	502.1	527.5	491.5	335.5	209.5	19
20	153.3	173.6	208.1	239.3	396.9	425.6	507.1	499.0	528.1	487.9	329.1	209.6	20
21	153.3	175.8	208.9	240.0	400.3	426.2	506.5	495.8	527.6	484.2	323.2	209.5	21
22	154.6	177.2	210.0	240.8	403.4	427.1	505.3	492.2	525.7	480.0	317.0	209.3	22
23	155.2	178.9	210.9	241.2	406.4	428.3	503.9	488.9	523.2	475.5	311.0	209.9	23
24	156.0	180.4	212.3	242.5	409.3	429.7	502.2	485.7	520.9	471.0	304.9	210.5	24
25	157.7	181.7	212.3	243.2	411.9	430.7	500.7	482.7	517.6	466.9	298.6	210.7	25
26	159.3	183.4	213.2	243.7	414.5	431.7	500.0	479.7	515.0	463.5	292.9	210.6	26
27	159.8	184.6	214.5	243.9	418.0	433.2	498.7	477.6	513.6	459.1	287.1	210.7	27
28	159.1	185.8	215.7	244.5	422.4	438.0	497.3	480.6	512.3	454.7	281.2	209.4	28
29	159.6	186.9	216.9	245.6		443.9	496.0	485.0	509.6	449.7	275.4	206.9	29
30	160.2	188.2	217.7	249.4		447.7	494.8	489.3	505.3	444.4	269.0	205.0	30
31	160.9		218.7	270.8		451.3		495.5	.	439.1	263.4		31
Monthly Change	+14.9	+27.3	+30.5	+52.1	+151.6	+28.9	+43.5	+0.7	+9.8	-66.2	-175.7	-58.4	

E - Estimated
NR - No Record

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 00 00	119 42 10	SW 5 11S 21E				OCT 41-DATE	OCT 41-DATE	1941		0.00	USCGS

Station located near center of Friant Dam on San Joaquin River, immediately above Cottonwood Creek, 0.9 mi. NE of Friant. Usable capacity, 503,000 ac.-ft. between elevations 375.4 and 578.0 ft. above mean sea level. Not available for release, 17,400 ac.-ft. Records furnished by U.S.B.R. Drainage area is 1,633 sq. mi.

TABLE B-4

DAILY MEAN DISCHARGE

DELTA-MENDOTA CANAL NEAR TRACY

IN SECOND FEET

STATION NO	WATER YEAR
B95925	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	1976	716	0.0	0.0	506	1158	1264	1261	3178	3953	4165	2740	1
2	1982	717	0.0	0.0	505	1064	1079	1476	2821	3925	4169	2735	2
3	1863	717	0.0	0.0	507	1064	1077	1796	2535	3926	4163	2735	3
4	1729	717	0.0	146	508	1057	1148	1962	2533	3770	4160	2567	4
5	1726	786	0.0	0.0	878	1660	1149	1961	2605	3770	4161	2433	5
6	1789	788	0.0	0.0	877	1870	971	1960	2713	3511	4030	2389	6
7	1826	716	0.0	0.0	942	1804	972	2131	3463	3510	3902	2228	7
8	1824	716	0.0	0.0	1177	1910	974	2133	3597	3509	3900	2229	8
9	1919	755	0.0	0.0	1040	1981	905	2427	3594	3507	3892	2228	9
10	1926	755	0.0	0.0	615	2268	942	2458	3600	3506	3793	1928	10
11	1888	754	0.0	0.0	615	2041	1157	2463	3593	3800	3796	1827	11
12	1676	681	0.0	0.0	613	2128	1159	2365	3593	4172	3795	1827	12
13	1575	681	0.0	0.0	649	2161	1158	2464	3420	4233	3700	1832	13
14	1579	681	0.0	0.0	503	2329	1160	2466	3278	4341	3699	1831	14
15	1171	680	0.0	70	466	2333	1012	2461	3442	4186	3826	1829	15
16	970	753	0.0	282	469	2267	1011	2524	3510	4063	3904	2068	16
17	868	752	0.0	0.0	467	1901	1268	2592	3518	4059	3910	1928	17
18	937	752	0.0	69	866	1896	1230	2812	3528	4163	3898	1928	18
19	936	713	0.0	320	932	1891	1232	2815	3655	4227	3769	1826	19
20	934	785	0.0	862	1132	1974	1339	2821	3844	4293	3743	1827	20
21	929	787	0.0	927	898	2002	1341	3462	3850	4351	3630	1830	21
22	928	787	0.0	1160	868	2038	1411	3657	3980	4288	3630	1830	22
23	929	717	0.0	1159	867	2022	1195	3726	3018	4159	3630	1828	23
24	1029	717	0.0	1160	867	1884	1197	3794	2362	4214	3560	1826	24
25	1030	715	0.0	1160	866	1846	1269	3730	3443	4368	3463	1827	25
26	1027	928	0.0	1159	866	1950	1381	3634	3602	4203	3201	1670	26
27	1092	865	176	1663	930	1951	1379	3564	4160	4378	3151	1670	27
28	1114a	864	0.0	1159	930	1294	1244b	3296	4150	4382	3158	1668	28
29	1025	865	0.0	1158		897	1264	3247	4143	4381	2986	1671	29
30	861	538	0.0	1097		938	1260	3244	4145	4355	2987	1669	30
31	716		0.0	541		1262		3249		4197	2882		31
MEAN	1348	747	6	455	763	1769	1172	2708	3429	4055	3698	2014	MEAN
MAX	1982	928	176	1663	1177	2333	1411	3794	4160	4382	4169	2740	MAX
MIN.	716	538	0.0	0.0	466	897	905	1261	2362	3506	2882	1668	MIN.
AC.FT.	82950	44426	349	27951	42365	108776	69612	166514	204046	249322	227411	119849	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *
a - 25 hr. day
b - 23 hr. day

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1847											1343571

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 47 45	121 35 05	SW31 1S 4E				JUN 51-DATE		1951		0.00	USGS

Station located at Tracy Pumping Plant at intake to canal, 6 mi. SE of Byron, 10 mi. NW of Tracy. Discharge computed from records of operation of pumps. Water is diverted from Sacramento-San Joaquin Delta by way of Old River and a dredged channel to the Tracy Pumping Plant where it is lifted about 200 ft. into canal. Records furn. by U.S.B.R.

TABLE B-5

DAILY MEAN DISCHARGE

DELTA-MENDOTA CANAL TO MENDOTA POOL

IN SECOND FEET

STATION NO	WATER YEAR
800770	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	1615	510	238	0.0	200	895	1040	1149	2195	3000	2820	2161	1
2	1504	520	218	0.0	200	885	849	1289	1971	2846	2809	2136	2
3	1482	524	200	0.0	200	828	859	1340	1802	2816	2829	2109	3
4	1390	525	200	0.0	217	861	856	1497	1757	2805	2939	1932	4
5	1424	534	200	0.0	323	1358	868	1491	1790	2767	2966	1804	5
6	1488	530	175	0.0	500	1500	647	1499	1980	2642	2937	1577	6
7	1429	519	200	0.0	523	1463	667	1714	2428	2586	2854	1568	7
8	1436	511	200	0.0	894	1497	681	1734	2647	2590	2700	1592	8
9	1430	509	200	0.0	515	1498	702	1959	2616	2583	2705	1613	9
10	1408	503	370	0.0	370	1627	800	1944	2657	2544	2788	1370	10
11	1365	523	325	0.0	246	1637	937	1897	2668	2704	2701	1419	11
12	1199	497	17	0.0	245	1642	906	1814	2668	2805	2753	1248	12
13	1133	514	0.0	0.0	311	1635	928	1874	2581	2933	2752	1260	13
14	1147	506	0.0	0.0	206	1783	929	1875	2297	3037	2713	1290	14
15	794	499	0.0	0.0	195	1737	771	1897	2352	3058	2747	1281	15
16	700	490	0.0	0.0	196	1765	803	1918	2553	2904	2733	1313	16
17	700	490	0.0	0.0	196	1450	1047	1907	2547	2832	2782	1185	17
18	701	490	0.0	0.0	347	1465	1066	2092	2502	2812	2834	1180	18
19	715	490	0.0	0.0	627	1496	1100	2074	2508	2824	2800	1062	19
20	763	496	0.0	0.0	798	1713	1152	2137	2716	2917	2718	1082	20
21	745	504	0.0	573	677	1667	1158	2386	2717	2996	2554	1057	21
22	763	504	0.0	657	571	1580	1129	2628	2707	2983	2587	1051	22
23	786	515	0.0	724	580	1515	885	2664	1537	2856	2592	1052	23
24	909	515	0.0	742	585	1370	971	2733	1567	2821	2567	1064	24
25	894	516	0.0	819	573	1373	1132	2730	2316	2942	2506	1071	25
26	881	594	0.0	723	572	1435	1208	2612	2516	2878	2468	1105	26
27	912a	694	0.0	680	567	1440	1179b	2627	2759	2942	2252	1157	27
28	877	702	0.0	673	620	782	1020	2370	2893	2879	2258	1312	28
29	867	691	0.0	588		478	1055	2267	3031	3016	2237	1320	29
30	561	664	0.0	465		635	1062	2213	2857	2966	2200	1306	30
31	528		0.0	280		929		2223		2917	2082		31
MEAN	1050	536	82	223	430	1353	947	2018	2405	2845	2651	1389	MEAN
MAX.	1615	702	370	819	894	1783	1208	2733	3031	3058	2966	2161	MAX
MIN.	528	490	0.0	0.0	195	478	647	1149	1537	2544	2082	1051	MIN.
AC.FT.	64629	31892	5044	13734	23909	83185	56247	124074	143078	174944	163008	82665	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
\# - E and *
a - 25 hr. day
b - 23 hr. day

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1327											966409

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF DATUM
36 47 11	120 23 05	NW19 13S 15E									

Station located approximately 2 mi. N of Mendota, where DMC crosses the Outside Canal, which is 0.8 mi. NW of Bass Avenue crossing (check No. 21). Flow measured by 3 Sparling meters located at siphon outlet.

Record furnished by U.S.B.R.

TABLE B-6

DAILY MEAN DISCHARGE

SAN JOAQUIN RIVER NEAR MENDOTA

IN SECOND FEET

STATION NO	WATER YEAR
B07710	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	144	52	32	2	50	50	150	219	351	424	431	278	1
2	140	51	31	1	19	51	166	246	351	424	448	274	2
3	129	50	30	53	28	76	177	291	348	411	466	261	3
4	116	50	41	82	70	125	180	294	346	411	459	244	4
5	111	49	66	48	84	166	175	296	351	404	448	231	5
6	109	48	93	29	106	177	175	296	354	388	426	221	6
7	109	48	95	66	101	164	171	334	366	391	404	238	7
8	103	47	59	111	82	152	148	381	384	396	391	256	8
9	93	47	58	125	70	162	134	354	391	401	398	264	9
10	76	47	56	103	63	175	129	328	418	414	426	274	10
11	66	47	47	75	54	177	127	314	451	434	421	271	11
12	67	47	35	54	59	177	127	296	424	454	416	284	12
13	71	48	27	38	78	177	125	316	411	456	404	286	13
14	72	49	32	29	65	184	127	314	411	459	404	286	14
15	72	50	38	25	53	193	144	304	418	461	398	286	15
16	92	51	41	23	56	196	169	318	436	451	394	288	16
17	116	51	37	20	67	193	196	351	451	454	391	291	17
18	116	50	37	18	67	193	224	366	469	461	381	291	18
19	116	49	27	13	67	209	236	361	456	461	371	276	19
20	116	48	14	7	61	224	217	354	456	461	408	286	20
21	116	47	13	14	54	217	154	354	461	461	418	296	21
22	125	45	12	72	54	202	150	376	461	454	386	294	22
23	138	45	10	142	53	193	134	396	469	451	368	291	23
24	148	45	8	221	53	191	152	411	464	451	368	291	24
25	162	44	8	231	53	200	205	396	456	454	358	291	25
26	164	39	7	224	58	229	198	391	441	469	348	298	26
27	154	33	5	182	61	231	171	391	461	479	356	301	27
28	144	32	4	209	51	193	158	361	454	477	371	298	28
29	142	33	3	248		150	180	351	434	469	364	298	29
30	126	32	3	205		144	209	348	421	434	344	234	30
31	81		2	116		146		346		416	316		31
MEAN	114	46	31	90	62	172	167	337	419	440	396	276	MEAN
MAX	164	52	95	248	106	231	236	411	469	479	466	301	MAX
MIN	66	32	2	1	19	50	125	219	346	388	316	221	MIN
AC.FT.	7010	2730	1930	5530	3450	10550	9930	20740	24920	27040	24360	16420	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day.
# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
213											154610

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
36 48 37	120 22 35	SW 7 13S 15E	8840		6-1-52	OCT 39-DATE	OCT 39-DATE	1939		142.53	USBR

Station located 2.5 mi. below Mendota Dam, 4 mi. N. of Mendota. Records furn. by U.S.B.R. Drainage area is 4,310 sq. mi. This station equipped with DWR radio telemeter.

TABLE B-7

DAILY MEAN DISCHARGE

BIG CREEK DIVERSION NEAR FISH CAMP

IN SECOND FEET

STATION NO	WATER YEAR
867920	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	1.3	2.2	2.6E	2.3E	1.5	23	24	37	35	21	4.4	3.5	1
2	1.7	2.1	2.7	2.3E	0.0	22	23	37	34	20	5.9	3.4	2
3	2.0	2.1	2.1*	2.3#	0.0	21	24	38 *	33	17 *	6.1	3.1	3
4	2.3	2.0	2.8	2.0E	0.0	20	28	38	32	16	6.1	3.1	4
5	2.5	2.2*	2.6	2.0E	9.4	20	31	38	32	16	6.3	3.9	5
6	2.2	2.1	2.4	2.0E	34	20	34	38	32	16	6.5*	3.6	6
7	2.1	1.8	2.4	1.9E	32	22 *	42	39	31 *	15	6.7	3.3	7
8	2.0	1.8	2.4	1.7E	32	19	37	41	31	15	6.5	2.8	8
9	2.0	1.8	2.4	1.7E	33	20	34	43	30	15	6.4	2.6	9
10	2.0	1.8	2.3	1.6E	35 *	19	32	40	31	14	6.2	2.5	10
11	2.2*	1.8	2.3	1.5E	32	20	32	39	30	13	5.9	2.5	11
12	2.2	1.8	2.2	1.6E	31	19	33	38	30	13	5.7	2.5	12
13	2.1	1.9	2.1	1.6E	36	19	33	35	29	12	5.4	3.4	13
14	19	2.2	2.2	1.4E	33	18	40	36	28	12	5.0	3.3	14
15	4.7	2.3	3.9	1.2E	30	18	38	37	28	11	4.8	3.0	15
16	3.5	2.3	14	1.2E	29	15	35	38	27	11	4.5	3.2	16
17	3.2	2.4	5.3	1.2E	28	21	34	39	26	10	4.4	3.4*	17
18	2.7	2.3	5.4	1.3E	27	23	33	40	25	9.9	4.4	4.8	18
19	2.5	2.2	4.1	1.4E	26	22	33	40	24	9.3	4.5	5.2	19
20	2.4	2.4	3.4	1.4E	26	22	30	41	23	9.0	4.3	4.4	20
21	2.4	2.3	3.2E	1.2E	26	22	32	41	23	9.2	4.3	4.3	21
22	2.3	2.2	2.7E	1.3E	25	22	32	40	23	8.8	4.3	3.5	22
23	2.2	2.2	2.7E	1.3E	24	21	32	39	24	8.6	4.3	3.3	23
24	2.2	2.2	2.7E	1.2E	24	22	34	38	24	8.1	4.5	2.9	24
25	2.5	2.3	2.7E	1.3E	23	22	33	38	22	7.7	4.4	3.0	25
26	2.3	2.2	2.6E	1.2E	23	22	31	37	21	7.5	4.0	2.5	26
27	2.2	4.0	2.6E	1.2E	23	29	29	37	21	7.3	3.8	2.6	27
28	2.2	3.1	2.7E	1.4E	23	30	31	36	21	7.0	3.5	2.6	28
29	2.2	2.8	2.6E	11 E		28	36	36	22	6.9	3.3	2.4	29
30	1.9	2.4E	2.4E	83 E		28	39	35	21	6.6	3.6	2.2	30
31	2.2		2.4E	62 E		28		35		6.4	3.6		31
MEAN	2.9	2.2	3.2	6.4	23.8	21.8	32.6	38.2	27.1	11.6	5.0	3.2	MEAN
MAX	19.0	4.0	14.0	83.0E	36.0	30.0	42.0	43.0	35.0	21.0	6.7	5.2	MAX
MIN.	1.3	1.8	2.1	1.2E	0.0	15.0	23.0	35.0	21.0	6.4	3.3	2.2	MIN
AC.FT.	177	133	196	396	1321	1343	1942	2348	1613	713	305	192	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
14.7	150E	3.58	1	30	2400	NR					10680

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF. DATUM
37 28 10	119 36 52	NE25 5S 21E	150	3.58	1-30-63	DEC 58-DATE		1958		0.00	LOCAL

Station located 195 ft. above road culvert pipe, 1.4 mi. SE of Fish Camp. This is regulated diversion from Big Creek to Lewis Fork, Fresno River. Stage-discharge relationship at times affected by ice and extreme high flows affected by culvert pipe below station.
Maximum discharge determined from slope area survey and maximum capacity of culvert pipe below station.

TABLE B-8

DAILY MEAN DISCHARGE

LEWIS FORK FRESNO RIVER NEAR OAKHURST
IN SECOND FEET

STATION NO	WATER YEAR
867325	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	2.3	5.9	4.9	9.8	1090 #	50	NR	122	112	50	20	7.0	1
2	2.3	6.3	4.8	10	161	47	NR	119	110	48	18	5.9	2
3	5.0	6.0	4.5*	10 *	58	45	NR	115 *	105	45 *	19	5.7	3
4	4.5	6.4	3.8	7.4	31	41	71.2**	109	108	44	19	6.0	4
5	4.7	5.9*	4.1	6.5	35	42	NR	104	104	42	17	6.6	5
6	3.9	6.5	3.8	6.5	55	42	NR	106	108	41	18 *	5.9	6
7	4.0	5.8	4.8	6.7	51	42 *	NR	104	108 *	39	10	5.0	7
8	4.5	4.9	5.0	7.2	45	43	NR	125	102	37	17	4.2	8
9	3.8	4.9	3.2	6.8	68	45	NR	186	102	38	16	4.0	9
10	3.8	4.9	4.4	6.4	161 *	44	NR	165	101	35	16	4.0	10
11	5.4*	4.4	4.4	7.1	84	44	NR	167	100	33	16	4.4	11
12	8.7	3.8	4.3	5.2	77	44	71	154	99	33	10	4.4	12
13	9.2	3.5	4.7	4.9	111	43	68	140	95	31	8.9	5.3	13
14	53	3.9	5.7	6.4	94	44	151	135	93	30	8.9	6.4	14
15	19	4.0	7.8	8.2	76	47	190 *	128	96	29	8.1	6.3	15
16	13	3.8	35	8.1	70	51	122	121	91	27	7.9	5.8	16
17	11	4.0	16	7.7	67	51	96	122	87	25	7.9	6.1*	17
18	10	3.1	15	7.8	62	54	85	121	83	28	8.7	8.8	18
19	8.8	3.1	11	7.5	62	52	102	117	79	25	7.5	14	19
20	8.3	8.1	11	7.2	57	NR	97	116	77 E	25	7.2	14	20
21	8.5	7.2	9.0	7.7	57	NR	119	123	75 E	24	7.8	9.9	21
22	8.0	6.7	7.6	8.1	56	NR	107	134	73 E	26	7.3	8.8	22
23	8.0	5.7	8.7	7.2	53	NR	109	137	72 E	25	7.4	9.4	23
24	7.6	5.2	8.5	7.7	51	NR	107	134	70 E	23	7.9	8.8	24
25	7.6	5.4	5.9	6.5	53	NR	109	131	70 E	23	7.0	7.9	25
26	7.5	6.0	6.1	6.6	52	NR	123	131	66 E	24	7.0	7.3	26
27	6.3	8.8	7.1	5.9	52	NR	103	128	61 E	23	6.8	7.8	27
28	6.9	9.7	7.8	6.1	49	171 **	104	124	59	22	6.3	7.5	28
29	6.8	7.5	8.9	9.1		NR	112	120	58	21	6.1	7.2	29
30	6.7	6.1	7.8	430		NR	123	117	54	21	6.4	7.1	30
31	6.1		7.8	1500 E		NR		114		19	7.2		31
MEAN	8.6	5.6	7.9	69.1	105	NR	NR	128	87.3	30.8	10.9	7.1	MEAN
MAX	53.0	9.7	35.0	1500 E	1090 E	NR	NR	186	112	50.0	20.0	14.0	MAX
MIN.	2.3	3.1	3.2	4.9	31.0	NR	NR	104	54.0	19.0	6.1	4.0	MIN.
AC.FT.	526	332	483	4249	5827	NR	NR	7872	5193	1896	671	420	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *
** - Result of discharge measurements.

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
NR	NR					NR					NR

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 20 44	119 38 20	SE 2 7S 21E	2930E	493	2- 1-63	SEP 61-DATE		1961	DATE	0.00	LOCAL

Station located 1.6 mi. N. of Oakhurst on Highway 41, 500 ft. downstream from Shady Oaks Motel. Station located on left bank above concrete weir. Altitude of gage is approximately 2,520 ft. (from topographic map.)

TABLE B-9

DAILY MEAN DISCHARGE

MIAMI CREEK NEAR OAKHURST

IN SECOND FEET

STATION NO	WATER YEAR
867300	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.4	0.8	1.2	1.4	391 #	5.6	14	24	10	4.9	1.7	1.6	1
2	0.4	2.2	1.2	1.2	45	5.4	12	23	9.4	4.9	1.7	1.5	2
3	0.4	1.4	1.2*	1.3*	20	5.2	12	21 *	8.9	4.6*	1.9	1.4	3
4	0.5	1.1	1.3	1.3	13	5.2	12 *	19	8.9	4.4	1.8	1.4	4
5	0.5	1.1*	1.3	1.3	10	5.2	14	19	9.1	4.5	1.8	1.5	5
6	0.6	1.1	1.2	1.3E	9.1	5.1	16	18	9.4	4.2	1.7*	1.4	6
7	0.6	1.0	1.2	1.3E	8.1	5.0	35	18	8.7*	4.2	1.6	1.3	7
8	0.6	0.9	1.2	1.3	7.2	5.0	28	21	8.0	3.9	1.7	1.2	8
9	0.5	0.9	1.1	1.3	8.6	5.0	20	30	7.4	3.8	1.7	1.2	9
10	0.5*	0.9	1.1	1.3	30	5.0	17	22	7.5	3.8	1.6	1.2	10
11	0.6	0.9	1.1	1.3	17	4.8*	15	24	7.8	3.6	1.5	1.2	11
12	0.6	0.9	1.1	1.2E	12	4.6	14	22	8.4	3.4	1.6	1.3	12
13	0.7	0.9	1.1	1.0E	22	4.4	14	19	8.4	3.3	1.5	1.4	13
14	2.6	1.0	1.1	1.4	18	4.6	42	18	8.1	3.2	1.6	1.5	14
15	1.4	1.1	1.2	1.3	12	5.1	50	17	7.9	3.1	1.5	1.4	15
16	1.2	1.1	6.1	1.3	10	5.2	29	15	7.3	3.1	1.5	1.4	16
17	2.4	1.1	2.6	1.3	9.5	5.8	22	14	7.1	3.1	1.5	1.4*	17
18	3.4	1.1	2.4	1.2	8.6	6.0	18	14	6.8	3.0	1.4	1.7	18
19	1.2	1.2	1.9	1.1	7.9	6.1	22	13	3.8	2.7	1.5	2.3	19
20	1.0	1.2	1.6	1.1	7.5	6.4	21	12	5.9	2.7	1.5	3.1	20
21	1.0	1.2	1.4	1.1	7.6	7.3	20	12	5.9	2.6	1.5	2.0	21
22	0.9	1.1	1.3	1.2	7.2	8.1	21	11	5.8	2.6	1.6	1.7	22
23	0.9	1.1	1.3	1.2	6.7	14	23	11	6.2	2.4	1.6	1.4	23
24	0.9	1.1	1.3	1.2	6.4	12	24	12	6.1	2.4	1.7	1.4	24
25	1.0	1.1	1.2	1.2E	6.1	11	22	12	5.7	2.2	1.7	1.3	25
26	1.0	1.1	1.3	1.1E	5.9	11	23	11	5.4	2.2	1.5	1.2	26
27	0.9	1.4	1.1	1.2E	5.9	16	22	11	5.0	2.2	1.4	1.0	27
28	0.9	1.5	1.2	1.3E	5.7	38	22	11	5.0	2.1	1.4	1.0	28
29	0.8	1.3	1.2	1.6		23	24	11	5.0	1.9	1.4	1.0	29
30	0.8	1.2	1.2	95 E		17	25	11	4.9	1.8	1.6	1.0	30
31	0.8		1.3	443 E		16		10		1.8	1.6		31
MEAN	1.0	1.1	1.5	18.5	25.6	9.0	21.8	16.3	7.1	3.2	1.6	1.4	MEAN
MAX.	3.4	2.2	6.1	443 E	391 E	38.0	50.0	30.0	10.0	4.9	1.9	3.1	MAX
MIN.	0.4	0.8	1.1	1.0	5.7	4.4	12.0	10.0	3.8	1.8	1.4	1.0	MIN.
AC.FT.	60	67	91	1139	1424	552	1295	1004	424	196	98	86	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
8.9	1140 E	9.08	2	1	0110	0.3	2.4	10	1	1650	6435

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF. DATUM
37 23 38	119 39 10	SE22 6S 21E	1140E	9.08	2- 1-63	DEC 59-DATE		1959	Date	0.00	

Station located 150 ft. below bridge, 4.5 mi. N. of Oakhurst. Tributary to Fresno River. Stage-discharge relationship at times affected by ice. Drainage area is 10.6 sq. mi. Recorder installed December 15, 1959. Altitude of gage is approximately 3,500 ft. (from topographic map.)

TABLE B-10

DAILY MEAN DISCHARGE

SAN JOAQUIN RIVER NEAR DOS PALOS

IN SECOND FEET

STATION NO	WATER YEAR
807610	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.0	1	12	0.0	0.0	0.0	7	12	4	0.0	1
2	0.0	0.0	0.0	0.0	90	0.0	0.0	0.0	12	12	12	0.0	2
3	0.0	0.0	0.0	0.0	29	0.0	0.0	0.0	12	5	12	0.0	3
4	0.0	0.0	0.0	32	6	0.0	0.0	0.0	8	0.0	3	0.0	4
5	0.0	0.0	0.0	121	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	5
6	0.0	0.0	0.0	101	0.0	0.0	0.0	0.0	12	0.0	0.0	9	6
7	0.0	0.0	0.0	71	0.0	0.0	0.0	0.0	9	7	0.0	4	7
8	0.0	0.0	0.0	120	0.0	0.0	0.0	0.0	8	12	0.0	0.0	8
9	0.0	0.0	0.0	186	0.0	0.0	0.0	0.0	12	12	0.0	0.0	9
10	0.0	0.0	0.0	202	0.0	0.0	0.0	0.0	12	4	0.0	0.0	10
11	0.0	0.0	0.0	182	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	11
12	0.0	0.0	0.0	88	0.0	8	0.0	0.0	7	0.0	7	0.0	12
13	0.0	0.0	0.0	16	0.0	12	0.0	0.0	0.0	0.0	12	3	13
14	0.0	0.0	0.0	10	0.0	12	0.0	0.0	4	0.0	4	4	14
15	0.0	0.0	0.0	7	0.0	12	0.0	0.0	12	0.0	0.0	0.0	15
16	0.0	0.0	0.0	5	0.0	6	0.0	0.0	12	9	0.0	0.0	16
17	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	12	12	0.0	0.0	17
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8	12	10	0.0	0.0	18
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	12	0.0	0.0	0.0	19
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12	12	0.0	0.0	0.0	20
21	0.0	0.0	12	0.0	0.0	0.0	0.0	12	12	0.0	0.0	0.0	21
22	0.0	0.0	18	0.0	0.0	0.0	0.0	12	4	8	7	0.0	22
23	0.0	0.0	16	0.0	0.0	0.0	0.0	0.0	0.0	11	12	4	23
24	0.0	0.0	12	0.0	0.0	0.0	0.0	0.0	9	0.0	3	0.0	24
25	0.0	0.0	10	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	25
26	0.0	0.0	8	0.0	0.0	0.0	0.0	0.0	12	0.0	0.0	0.0	26
27	0.0	0.0	6	0.0	0.0	0.0	0.0	0.0	12	9	0.0	0.0	27
28	0.0	0.0	5	0.0	0.0	0.0	0.0	0.0	12	5	0.0	9	28
29	0.0	0.0	4	0.0		0.0	0.0	0.0	12	0.0	0.0	5	29
30	0.0	0.0	2	0.0		0.0		0.0		0.0	0.0		30
31	0.0		1	0.0		0.0		0.0		0.0	0.0		31
MEAN	0.0	0.0	3.0	37.0	4.9	1.6	0.0	1.8	9.9	4.1	2.5	1.3	MEAN
MAX	0.0	0.0	18	202	90	12	0.0	12	12	12	12	9	MAX
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MIN.
AC.FT.			186	2270	272	99	0.0	111	587	254	151	75	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
\# - E and *

WATER YEAR SUMMARY

MEAN DISCHARGE	MAXIMUM DISCHARGE	GAGE HT	MO	DAY	TIME	MINIMUM DISCHARGE	GAGE HT	MO	DAY	TIME	TOTAL ACRE-FEET
5.5											4005

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.&R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 59 38	120 30 02		8200		6-5-52	OCT 40-DATE	OCT 40-DATE	1940		116.5	USED

Station located 800 ft. below the head of Temple Slough, 6.5 mi. E of Dos Palos. Records furn. by U.S.B.R. Drainage area is approx. 5,630 sq. mi.

TABLE B-11

DAILY MEAN DISCHARGE

EAST FORK CHOWCHILLA RIVER NEAR AHWAHNEE

IN SECOND FEET

STATION NO	WATER YEAR
B64400	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	1.0	2.6	2.2	1370 E	23	98	100	36	13	2.6	1.0	1
2	0.0	1.0	2.3	2.0	180	23	87	95	34	12	2.5	1.0	2
3	0.0	1.0	2.3	1.9	115	24	75	90	32	12	2.3	1.0	3
4	0.0	1.0	2.3	2.2	106	21	69	86	29	11	2.3	0.9	4
5	0.0	1.0	2.3	2.4	103	22	64	82	30	11	2.3	0.8	5
6	0.0	1.1	2.2	2.7	102	20	68	78	31	11	2.4	0.8	6
7	0.0	1.2	2.2	2.8	101	19	278	74	33	11	2.3	0.7	7
8	0.0	1.1	2.1	2.6	101	19	166	81	29	11	2.2	0.6	8
9	0.0	1.2	2.3	2.8	106	21	115	122	26	9.9	2.2	0.5	9
10	0.0	1.2	2.3	2.6	218 *	20	107	90	26	9.2	1.9	0.4	10
11	0.0	1.2	2.2	2.6	116	19	92	100	27	9.1	1.8	0.3	11
12	0.0	1.2	2.0	2.8	109	17	83	91	28	8.7	1.6	0.3	12
13	0.1	1.3	1.9	2.8	138	16	75	82	30	7.7	1.8	0.4	13
14	23	1.6	2.1	2.6	125	17	284	83	27	7.3	1.4	0.5	14
15	6.6*	2.0	2.5	2.7	103 E	26	304	75	24	6.8	1.4	0.6	15
16	2.8	2.6*	12	2.7*	85 E	36	157	68	22	6.5	1.3	0.6	16
17	1.8	2.3	7.9*	3.1	69 E	52	122	62	20	6.2	1.2	0.6	17
18	1.3	2.1	4.8	3.0	51 E	36 *	108	56	18 *	6.4*	1.1	0.8	18
19	1.0	2.2	4.0	3.8	46	45	139	53	17	6.1	1.1	1.3	19
20	0.9	2.2	3.5	3.5	41	55	176	51	16	5.4	1.1	4.8*	20
21	0.8	2.2	3.0	3.9	37	48	199	48 *	16	5.3	1.0	3.1	21
22	0.8	2.1	2.8	3.9	35	47	159 *	44	17	5.2	1.1	2.2	22
23	0.8	2.1	2.8	3.9	32	142	141	44	17	4.7	1.2*	1.9	23
24	0.9	2.0	2.8	4.3	30	105	128	45	17	4.6	1.3	1.7	24
25	0.9	2.0	2.7	4.3	28	82	119	45	16	4.3	1.3	1.5	25
26	1.0	2.0	2.6	4.7	27	68	169	44	15	4.2	1.3	1.2	26
27	1.2	2.5	2.6	4.7	26	77	132	42	14	4.3	1.2	0.8	27
28	1.3	3.2	2.4	4.7	26	438 *	115	40	14	4.1	1.0	0.6	28
29	1.1	3.1	2.3	5.3		151	107	41	14	3.7	1.0	0.5	29
30	1.0	2.7	2.4	365 *		115	103	39	13	3.5	1.0	0.5	30
31	1.0		2.2	1610 E		104		37		3.1	1.1		31
MEAN	1.6	1.8	3.0	66.7	130	61.5	135	67.4	22.9	7.4	1.6	1.1	MEAN
MAX.	23.0	3.2	12.0	1610 E	1370 E	438	304	122	36.0	13.0	2.6	4.8	MAX
MIN.	0.0	1.0	1.9	1.9	26.0	16.0	64.0	37.0	13.0	3.1	1.0	0.3	MIN
AC.FT.	96	106	187	4103	7192	3784	8011	4141	1365	453	98	63	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
40.9	3710 E	10.34	1	31	1530	0.0		10	1	1550	29600

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 20 09	119 48 59	SE 7 7S 20E	3710E	10.34	1-31-63	NOV 57-DATE		1957	Date	0.00	LOCAL

Station located 1.1 mi. above mouth, 5.5 mi. W of Ahwahnee. Drainage area 57.8 sq. mi.
Altitude of gage 980 ft. (from topographic map.)

TABLE B-12

DAILY MEAN DISCHARGE

WEST FORK CHOWCHILLA RIVER NEAR MARIPOSA

IN SECOND FEET

STATION NO	WATER YEAR
B64300	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.1	0.4	916 #	7.6	33	50	14	3.1	0.2	0.0	1
2	0.0*	0.0	0.2	0.5	74	7.3	25	46	13	2.8	0.2	0.0	2
3	0.0	0.0	0.2	0.4	34	6.8	21	42	11	2.8	0.2	0.0	3
4	0.0	0.0	0.2	0.4*	20	6.2*	19	38	11	2.6	0.2	0.0	4
5	0.0	0.0	0.2	0.3	13	6.1	18	36	11	2.4	0.2	0.0	5
6	0.0	0.0	0.2	0.3	10	6.1	21	35	11	2.3	0.1	0.0	6
7	0.0	0.0	0.2	0.3	9.0	6.1	219	34	11	2.2	0.2	0.0	7
8	0.0	0.0	0.2	0.3	7.9	6.0	106	44	9.8	2.1	0.1	0.0	8
9	0.0	0.0	0.2	0.3	17	6.3	60	68	9.3	2.1	0.1	0.0	9
10	0.0	0.0	0.2	0.3	162	6.2	51	44	8.9	1.9	0.1	0.0	10
11	0.0	0.0	0.2	0.3	35	6.1	43	51	9.9	1.6	0.1	0.0	11
12	0.0	0.0	0.2	0.3	27	5.6	36	41	11	1.5	0.1	0.0	12
13	0.0	0.0	0.2	0.3	92	5.1	31	35	12	1.4	0.1	0.0	13
14	0.1	0.0	0.3	0.3	69	6.0	299	35	10	1.2	0.0	0.0	14
15	0.0	0.1	0.4	0.3	36	9.8	238	32	9.0	1.2	0.0	0.0	15
16	0.0	0.0*	2.5	0.3	27	17	111	29	8.2	1.0	0.0	0.0	16
17	0.0	0.0	2.3*	0.3	21	27	79	26	7.3	0.9	0.0	0.0	17
18	0.0	0.0	1.3	0.4	17	19	66	23	6.7*	0.9*	0.0	0.0	18
19	0.0	0.0	1.0	0.4	15	19	95	21	5.8	0.9	0.0	0.1	19
20	0.0	0.1	0.8	0.3	13	16	164	20	5.3	0.8	0.0	0.0*	20
21	0.0	0.1	0.8	0.3	12	14	176	19 *	5.0	0.8	0.0	0.0	21
22	0.0	0.1	0.7	0.4	11	12	123 *	19	4.9	0.7	0.0	0.0	22
23	0.0	0.1	0.7	0.4	10	46	100	18	4.9	0.6	0.0	0.0	23
24	0.0	0.1	0.7	0.4	9.6	35	84	20	5.2	0.6	0.0	0.0	24
25	0.0	0.1	0.6	0.4	8.9	21	75	20	4.5	0.5	0.0	0.0	25
26	0.0	0.1	0.6	0.4	8.4	17	119	19	4.1	0.5	0.0	0.0	26
27	0.0	0.2	0.6	0.4	7.9	18	85	18	3.8	0.5	0.0	0.0	27
28	0.0	0.1	0.5	0.4	7.5	207 *	68	18	3.5	0.4	0.0	0.0	28
29	0.0	0.1	0.5	0.5		57	59	18	3.4	0.4	0.0	0.0	29
30	0.0	0.1	0.5	233 *		38	55	16	3.3	0.4	0.0	0.0	30
31	0.0		0.5	1400 E		33		15		0.3	0.0		31
MEAN	0.0	0.0	0.6	53.0	60.4	22.4	89.3	30.6	7.9	1.3	0.1	0.0	MEAN
MAX	0.1	0.2	2.5	1400 E	916 E	207	299	68.0	14.0	3.1	0.2	0.1	MAX.
MIN.	0.0	0.0	0.1	0.3	7.5	5.1	18.0	15.0	3.3	0.3	0.0	0.0	MIN.
AC.FT.		3	35	3259	3352	1375	5314	1884	472	82	4		AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
21.8	3520 E	8.63	1	31	1520	0.0		10	1	0000	15780

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 25 14	119 52 25	SE10 6S 19E	3590E	8.67	4- 3-58	NOV 57-DATE		1957		0.00	LOCAL

Station located 15 ft. below Indian Peak Road Bridge, 6.7 mi. SE of Mariposa. Drainage area is 33.6 sq. mi. Altitude of gage is 1,680 ft. (from topographic map.)

TABLE B-13

DAILY MEAN DISCHARGE

MIDDLE FORK CHOWCHILLA RIVER NEAR NIPINNAWASEE

IN SECOND FEET

STATION NO	WATER YEAR
864360	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.1	0.2	0.3	473	4.0	17	26	9.6	2.8	0.2	0.2	1
2	0.0*	0.1	0.2	0.4	39	3.9	14	24	9.1	2.7	0.2	0.2	2
3	0.0	0.1	0.2	0.4	17	3.8	12	23	8.2	2.1	0.2	0.2	3
4	0.0	0.1	0.2	0.3*	12	3.9	11	21	6.8	1.9	0.2	0.2	4
5	0.0	0.1	0.2	0.3	8.9*	4.8	10	19	6.6	1.8	0.2	0.2	5
6	0.0	0.2	0.2	0.3	7.3	4.8	10	19	6.8	1.6	0.1E	0.1	6
7	0.0	0.2	0.2	0.3	6.1	4.7	176	20	6.8	1.6	0.2E	0.1	7
8	0.0	0.1	0.2	0.3	5.2	4.5	59	25	6.5	1.5	0.2E	0.1	8
9	0.0	0.2	0.2	0.4	8.2	4.6	28	43	6.2	1.5	0.1E	0.1	9
10	0.0	0.2	0.2	0.4	71 *	4.4	25	25	6.2	1.2	0.1E	0.1	10
11	0.0	0.2	0.2	0.4	17	4.4	23	28	6.2	1.0	0.1E	0.1	11
12	0.0	0.2	0.2	0.3	14	4.1	22	23	6.8	0.8	0.1E	0.1	12
13	0.1	0.2	0.2	0.3	44	3.7	20	20	7.1	0.7	0.1E	0.1	13
14	3.9	0.3	0.2	0.3	36	4.3	141	21	5.9	0.6	0.1E	0.2	14
15	0.3*	0.3	0.3	0.3	18	5.7	125	19	5.5	0.6	0.1E	0.2	15
16	0.1	0.3*	2.7	0.3	14	8.0	46	17	5.0	0.5	0.1E	0.2	16
17	0.1	0.3	1.2*	0.3	11	11	32	17	4.9	0.5	0.1E	0.2	17
18	0.1	0.3	0.7	0.3	9.7	8.4*	28	15	4.1*	0.5*	0.1E	0.3	18
19	0.1	0.2	0.6	0.4	8.8	13	52	14	3.6	0.5	0.1E	0.4	19
20	0.1	0.2	0.5	0.4	7.8	19	78	14	3.5	0.5	0.1E	0.4*	20
21	0.1	0.3	0.4	0.4	6.4	15	87	12 *	3.5	0.5	0.1E	0.3	21
22	0.1	0.2	0.4	0.4	5.8	11	71 *	12	3.8	0.5	0.1E	0.3	22
23	0.1	0.2	0.4	0.3	5.3	37	54	12	4.0	0.5	0.1#	0.3	23
24	0.1	0.2	0.4	0.3	4.8	24	38	13	3.9	0.4	0.2	0.3	24
25	0.1	0.2	0.4	0.3	4.5	13	30	12	3.7	0.3	0.1	0.2	25
26	0.2	0.2	0.4	0.4	4.5	11	68	12	3.2	0.3	0.2	0.2	26
27	0.2	0.2	0.4	0.4	4.5	11	44	12	3.0	0.3	0.1	0.2	27
28	0.2	0.2	0.4	0.4	4.2	182 *	34	11	3.1	0.3	0.1	0.1	28
29	0.1	0.2	0.4	0.6		35	29	11	3.1	0.3	0.1	0.1	29
30	0.1	0.2	0.4	134 *		21	28	9.9	3.1	0.2	0.2	0.1	30
31	0.1		0.4	572 *		17		9.3		0.2	0.2		31
MEAN	0.2	0.2	0.4	23.1	31.0	16.2	47.1	18.0	5.3	0.9	0.1	0.2	MEAN
MAX.	3.9	0.3	2.7	572	473	182	176	43.0	9.6	2.8	0.2	0.4	MAX
MIN.	0.0	0.1	0.2	0.3	4.2	3.7	10.0	9.3	3.0	0.2	0.1	0.1	MIN.
AC.FT.	12	12	26	1421	1722	996	2801	1109	317	57	8	12	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day
\# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
11.7	1280	10.10	2	1	0150	0.0		10	1	0000	8492

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 22 56	119 50 11	NE25 6S 19E	1280	10.10	2- 1-63	MAR 58-DATE	MAR 58-DATE	1958	Date	0.00	LOCAL

Station located 6 mi. W of Nipinnawasee, 10 mi. SE of Mariposa. Tributary to East Fork Chowchilla River. Drainage area is 12.3 sq. mi. Altitude of gage is 1,520 ft. (from topographic map.)

TABLE B-14

DAILY MEAN DISCHARGE

STRIPED ROCK CREEK NEAR RAYMOND

IN SECOND FEET

STATION NO	WATER YEAR
B64260	1963

DAY	OCT.	NOV	DEC.	JAN	FEB.	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	0.0	0.1	0.1	0.2	297 #	5.4	6.9	14	4.3	0.3	0.0	0.1	1
2	0.0	0.1	0.2	0.2	23	5.2	5.8	13	3.9	0.3	0.0	0.0	2
3	0.0	0.1	0.2	0.2	12	4.5	5.0	13	3.5	0.2*	0.1	0.0	3
4	0.0	0.1	0.2	0.2	9.4	3.4*	5.7	12	3.1	0.2	0.1	0.0	4
5	0.0	0.1	0.1	0.2	7.5	2.8	5.0	11	3.1*	0.3	0.1	0.1*	5
6	0.0	0.1	0.1	0.2	6.1	2.8	5.2	11 *	3.2	0.2	0.0	0.0	6
7	0.0	0.1	0.2	0.2	5.0	2.8	84	10	2.8	0.2	0.0	0.0	7
8	0.0	0.1	0.2	0.2	4.7	2.5	29	11	2.7	0.2	0.0	0.0	8
9	0.0	0.1	0.1	0.3	11	2.5	15	16	2.6	0.1	0.0	0.0	9
10	0.1	0.1	0.2	0.2	78	2.2	12	11	2.5	0.1	0.0	0.0	10
11	0.1	0.1	0.2	0.2	15	2.1	11	11	2.8	0.1	0.0	0.0	11
12	0.1	0.1	0.2	0.2	14	2.3	9.5	9.8	2.8	0.1	0.0	0.0	12
13	0.2	0.1	0.2	0.2	41	1.7	8.9	9.1	2.9	0.1	0.0	0.0	13
14	1.5	0.2	0.2	0.2	18	2.5	104	9.4	2.4	0.1	0.0	0.0	14
15	0.3*	0.2	0.3	0.2	13	4.3	55	8.7	2.1	0.0	0.0	0.0	15
16	0.2	0.1*	1.7	0.2*	12	5.0	26	8.0	1.9	0.0	0.0	0.0	16
17	0.2	0.2	0.4*	0.2	10	16	19	7.2	1.6	0.1	0.0	0.0	17
18	0.3	0.2	0.2	0.2	9.1	7.5	16	6.3	1.1	0.1	0.0	0.1	18
19	0.3	0.2	0.2	0.2	8.6	4.7	31	5.6	0.9	0.0	0.0	0.1	19
20	0.3	0.2	0.2	0.2	8.1	3.6	79	5.4	0.8	0.0	0.0	0.1	20
21	0.3	0.1	0.2	0.2	7.3	3.1	78	5.0	0.6	0.0	0.0	0.0	21
22	0.3	0.2	0.2	0.2	7.0	3.4	34	5.1	0.7	0.0	0.0	0.1	22
23	0.3	0.2	0.2	0.2	6.5	12	26	5.0	0.7	0.0	0.0	0.0	23
24	0.4	0.2	0.2	0.2	6.1	4.1	21	5.2	0.7	0.0	0.0	0.0	24
25	0.3	0.2	0.2	0.2	6.1	3.2	22	5.4	0.6	0.0	0.0	0.0	25
26	0.3	0.1	0.2	0.2	5.7	2.8	47	4.9	0.5	0.0	0.0	0.0	26
27	0.2	0.2	0.2	0.2	5.2	3.0	25	4.5	0.4	0.0	0.0	0.0	27
28	0.1	0.2	0.2	0.1	4.9	101 *	20	4.4	0.4	0.0	0.0	0.0	28
29	0.1	0.2	0.2	0.1		15	17	4.9	0.4	0.0	0.0	0.0	29
30	0.1	0.2	0.2	63 *		9.6	15	4.5	0.4	0.0	0.0	0.0	30
31	0.1		0.2	300 E		7.6		4.4		0.0	0.0		31
MEAN	0.2	0.1	0.2	11.9	23.3	8.0	27.9	8.3	1.9	0.1	0.0	0.0	MEAN
MAX	1.5	0.2	1.7	300 E	297 E	101	104	16.0	4.3	0.3	0.1	0.1	MAX
MIN.	0.0	0.1	0.1	0.1	4.7	1.7	5.0	4.4	0.4	0.0	0.0	0.0	MIN.
AC.FT.	12	9	15	731	1292	493	1662	507	112	5	1	1	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
\# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
6.7	892 E	7.53	2	1	0150	0.0		10	1	0000	4841

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 20 27	119 53 35	NE 9 7S 19E	1180E	8.87	4- 3-58	NOV 57-DATE		1957		0.00	LOCAL

Station located 8.7 mi. N of Raymond, 11 mi. SE of Mariposa. Tributary to Chowchilla River. Drainage area is 17.1 sq. mi. Altitude of gage is approximately 1090 ft. (from USGS topographic maps.)

TABLE B-15

DAILY MEAN DISCHARGE

MARIPOSA CREEK NEAR CATHAY

IN SECOND FEET

STATION NO	WATER YEAR
862400	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.0	0.0	0.0	1.5	1700 *	10 *	57	64	12	2.3	0.0	0.0	1
2	0.0*	0.0*	0.0	1.6	153	9.7	41	57	11	2.1	0.0	0.0	2
3	0.0	0.0	0.0	1.6	62	9.5	32	50	10	1.7	0.0	0.0	3
4	0.0	0.0	0.0	1.5	35	8.9	26	44	8.7	1.8	0.0	0.0	4
5	0.0	0.0	0.0*	1.4	21	8.2	21	38	8.4	1.8	0.0	0.0*	5
6	0.0	0.0	0.0	1.4	15	8.1	23	35	8.6	1.7	0.0*	0.0	6
7	0.0	0.0	0.0	1.4	11	8.1	327	34	7.9	1.6	0.0	0.0	7
8	0.0	0.0	0.0	1.4	9.2	7.5	179	40	7.4	1.4	0.0	0.0	8
9	0.0	0.0	0.0	1.4	66	9.5	102	65	6.8	1.4	0.0	0.0	9
10	0.0	0.0	0.0	1.3	647	8.8	75	39	6.4	1.3	0.0	0.0	10
11	0.0	0.0	0.2	1.3	120	8.2	58	41	7.0	1.0	0.0	0.0	11
12	0.0	0.0	0.8	1.2	79	7.6	47	34	7.3	0.9	0.0	0.0	12
13	0.0	0.0	0.9	1.1	529	6.8	38	30	7.2	0.8	0.0	0.0	13
14	0.0	0.0	1.0	1.1	332	7.5	423	27	7.2	0.6	0.0	0.0	14
15	0.0*	0.0	1.3	1.2*	125	13	440	25	6.5	0.5	0.0	0.0	15
16	0.0	0.0*	86	1.2	79	24	211	23	5.6	0.4	0.0	0.0	16
17	0.0	0.0	16	1.2	55	72	132	21	4.9*	0.3	0.0	0.0	17
18	0.0	0.0	6.3	1.3	41	53	95	19	4.2	0.3*	0.0	0.0	18
19	0.0	0.0	4.1	1.2	33	33	143	18	3.7	0.3	0.0	0.0*	19
20	0.0	0.0	3.3	1.2	26	24	333	17	3.4	0.3	0.0	0.0	20
21	0.0	0.0	2.8	1.2	20	20	415	16	3.3	0.2	0.0	0.0	21
22	0.0	0.0	2.5	1.2	18	21	240 *	16	3.7	0.1	0.0	0.0	22
23	0.0	0.0	2.2	1.2	16	47	162	16	3.3	0.1	0.0*	0.0	23
24	0.0	0.0	2.1	1.2	14	46	121	17 *	3.1	0.1	0.0	0.0	24
25	0.0	0.0	2.0	1.2	13	31	108	18	3.1	0.0	0.0	0.0	25
26	0.0	0.0	1.8*	1.3	12	25	199	16	2.9	0.0	0.0	0.0	26
27	0.0	0.0	1.8	1.2	11	24	128	14	2.5	0.0	0.0	0.0	27
28	0.0	0.0	1.6	1.2	11	662 *	100	14	2.5	0.0	0.0	0.0	28
29	0.0	0.0	1.6	1.3		155	85	14	2.4	0.0	0.0	0.0	29
30	0.0	0.0	1.6	453 *		86	75	13	2.3	0.0	0.0	0.0	30
31	0.0		1.6	2490 #		64		12		0.0	0.0		31
MEAN	0.0	0.0	4.6	96.1	152	49.0	148	28.6	5.8	0.7	0.0	0.0	MEAN
MAX	0.0	0.0	86.0	2490 E	1700	662	440	65.0	12.0	2.3	0.0	0.0	MAX
MIN.	0.0	0.0	0.0	1.1	9.2	6.8	21.0	12.0	2.3	0.0	0.0	0.0	MIN
AC.FT.			281	5912	8436	3012	8799	1759	344	46			AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
\# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
39.5	5290	10.69	2	1	0150	0.0		10	1	0000	28590

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 23 55	120 00 10	NE21 6S 18E	7180E[a]	11.62	4- 3-58	NOV 57-DATE		1957		0.00	LOCAL

Station located at Co. Rd. bridge, 5.6 mi. E. of Cathay School. Tributary to San Joaquin River. Drainage area is 66.0 sq. mi. Altitude of gage is 1100 ft. (from topographic map.)

a-Previously reported as 4530E cfs. After obtaining additional high flow discharge measurements, the stage-discharge relation for high flows was more closely defined. Maximum discharge of record adjusted to present rating. See Table B-1 for additional information.

TABLE B-16

DAILY MEAN DISCHARGE

MARIPOSA CREEK BELOW MARIPOSA RESERVOIR

IN SECOND FEET

STATION NO	WATER YEAR
862100	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.0	0.0	916	15	64	80	10 a	1.8	0.0	0.0	1
2	0.0	0.0	0.0	0.0	896	16	50	63	10 a	1.7	0.0	0.0	2
3	0.0	0.0	0.0	0.0	738	14	38	58	9.9a	1.5	0.0	0.0	3
4	0.0	0.0	0.0	0.0	637	14	35	48	9.3a	1.3	0.0	0.0	4
5	0.0	0.0	0.0	0.0	325	16	32	40	9.0a	1.2	0.0	0.0	5
6	0.0	0.0	0.0	0.0	64	16	23	35	8.7a	1.0	0.0	0.0	6
7	0.0	0.0	0.0	0.0	24	14	62	33	8.1a	0.7	0.0	0.0	7
8	0.0	0.0	0.0	0.0	22	14	321	32	7.8a	0.5	0.0	0.0	8
9	0.0	0.0	0.0	0.0	22	14	187	48	7.5a	0.2	0.0	0.0	9
10	0.0	0.0	0.0	0.0	343	15	127	46	7.2	0.0	0.0	0.0	10
11	0.0	0.0	0.0	0.0	374	16	90	34	7.2	0.0	0.0	0.0	11
12	0.0	0.0	0.0	0.0	134	14	67	33	6.9	0.0	0.0	0.0	12
13	0.0	0.0	0.0	0.0	174	13	50	28	6.9	0.0	0.0	0.0	13
14	0.0	0.0	0.0	0.0	449	12	124	25	6.9	0.0	0.0	0.0	14
15	0.0	0.0	0.0	0.0	275	16	375	24	6.9	0.0	0.0	0.0	15
16	0.0	0.0	0.0	0.0	108	16	355	21	6.6	0.0	0.0	0.0	16
17	0.0	0.0	0.0	0.0	64	27	239	20	6.3	0.0	0.0	0.0	17
18	0.0	0.0	0.0	0.0	43	46	155	20	5.3	0.0	0.0	0.0	18
19	0.0	0.0	0.0	0.0	38	39	134	19	5.0	0.0	0.0	0.0	19
20	0.0	0.0	0.0	0.0	32	30	183	18	4.6	0.0	0.0	0.0	20
21	0.0	0.0	0.0	0.0	28	25	410	17	4.0	0.0	0.0	0.0	21
22	0.0	0.0	0.0	0.0	23	21	360	16	3.6	0.0	0.0	0.0	22
23	0.0	0.0	0.0	0.0	22	28	244	16	3.4	0.0	0.0	0.0	23
24	0.0	0.0	0.0	0.0	21	43	190	16	3.0	0.0	0.0	0.0	24
25	0.0	0.0	0.0	0.0	19	39	134	15	2.6	0.0	0.0	0.0	25
26	0.0	0.0	0.0	0.0	19	29	180	14 a	2.4	0.0	0.0	0.0	26
27	0.0	0.0	0.0	0.0	18	27	198	13 a	2.0	0.0	0.0	0.0	27
28	0.0	0.0	0.0	0.0	17	258	148	12 a	2.0	0.0	0.0	0.0	28
29	0.0	0.0	0.0	0.0		427	120	12 a	1.9	0.0	0.0	0.0	29
30	0.0	0.0	0.0	0.0		198	96	11 a	1.9	0.0	0.0	0.0	30
31	0.0		0.0	552		93		11 a		0.0	0.0		31
MEAN	0.0	0.0	0.0	18	210	50	160	28	5.9	0.3	0.0	0.0	MEAN
MAX.	0.0	0.0	0.0	552	916	427	410	80	10.0a	1.8	0.0	0.0	MAX
MIN.	0.0	0.0	0.0	0.0	17	12	23	11 a	1.9	0.0	0.0	0.0	MIN
AC.FT.	0.0	0.0	0.0	1095	11687	3106	9515	1742	352	20	0.0	0.0	AC.FT.

E - Estimated
NR - No Record
✱ - Discharge measurement or observation of no flow made on this day.
♯ - E and ✱
a - Partially estimated

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
38.0	941		2	1		0.0					27517

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 16 52	120 09 45	NE36 7S 16E	6020		12-24-55	NOV 52-DATE	NOV 52-DATE	1952		337.63	USCGS

Station located 1.5 mi. below Mariposa Dam. Tributary to San Joaquin River via Bear Creek. Flow regulated by Mariposa Reservoir. Records furn. by U.S.C.E. Drainage area is 108 sq. mi.

TABLE B-17

DAILY MEAN DISCHARGE

MARIPOSA BYPASS NEAR CRANE RANCH

IN SECOND FEET

STATION NO	WATER YEAR
B00420	1963

DAY	OCT	NOV	DEC.	JAN	FEB.	MAR	APR	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15						No flow							15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
MEAN MAX. MIN. AC.FT.													MEAN MAX MIN. AC.FT

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO.	DAY	TIME	DISCHARGE	GAGE HT.	MO	DAY	TIME	ACRE-FEET
											NR

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 12 00	130 41 50	NW 31 8S 11E						1962		0.00	USCGS

This station was installed in January 1962 for the Lower San Joaquin Flood Control Project for the purpose of recording flows diverted into Mariposa bypass by float activated electrically operated gates. No continuous water stage recorder is installed to date. Miscellaneous measurements of instantaneous discharge will be presented when appropriate.

TABLE B-18

DAILY MEAN DISCHARGE

OWENS CREEK BELOW OWENS RESERVOIR

IN SECOND FEET

STATION NO	WATER YEAR
806170	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR.	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.1	0.5	0.5	0.5	76 a	2	6	8	0.8	0.0	0.0	0.0	1
2	0.2	0.5	0.5	0.5	43 a	2	5	7	0.8	0.0	0.0	0.0	2
3	0.2	0.5	0.5	0.5	7	2	4	6	0.6	0.0	0.0	0.0	3
4	0.3	0.5	0.5	0.5	4	2	3	5	0.5	0.0	0.0	0.0	4
5	0.4	0.5	0.5	0.5	3	2	3	4	0.5	0.0	0.0	0.0	5
6	0.4	0.5	0.5	0.5	2	2	3	4	0.5	0.0	0.0	0.0	6
7	0.4	0.5	0.5	0.5	2	2	9	4	0.5	0.0	0.0	0.0	7
8	0.4	0.5	0.5	0.5	2	2	12	5	0.5	0.0	0.0	0.0	8
9	0.5	0.5	0.5	0.5	7 a	2	6	11	0.5	0.0	0.0	0.0	9
10	0.5	0.5	0.5	0.5	73 a	2	5	5	0.5	0.0	0.0	0.0	10
11	0.5	0.5	0.5	0.5	22 a	2	4	5	0.5	0.0	0.0	0.0	11
12	0.5	0.5	0.5	0.5	8	2	4	4	0.5	0.0	0.0	0.0	12
13	0.5	0.5	0.5	0.5	55 a	2	4	3	0.5	0.0	0.0	0.0	13
14	0.5	0.5	0.5	0.5	73	2	18	3	0.5	0.0	0.0	0.0	14
15	0.5	0.5	0.5	0.5	19	4	39	3	0.5	0.0	0.0	0.0	15
16	0.5	0.5	5.0	0.6	10	3	16	3	0.5	0.0	0.0	0.0	16
17	0.5	0.5	1.2	0.6	7	4	11	2	0.5	0.0	0.0	0.0	17
18	0.5	0.5	0.7	0.6	5	4	8	2	0.5	0.0	0.0	0.0	18
19	0.5	0.5	0.6	0.6	4	3	9	2	0.5	0.0	0.0	0.0	19
20	0.5	0.5	0.6	0.6	4	2	23	1.8	0.5	0.0	0.0	0.0	20
21	0.5	0.5	0.6	0.6	3	2	80	1.6	0.5	0.0	0.0	0.0	21
22	0.5	0.5	0.6	0.6	3	2	48	1.5	0.5	0.0	0.0	0.0	22
23	0.5	0.5	0.6	0.6	3	6	19	1.5	0.5	0.0	0.0	0.0	23
24	0.5	0.5	0.6	0.6	3	4	14	1.5	0.5	0.0	0.0	0.0	24
25	0.5	0.5	0.6	0.6	3	3	12	1.6	0.5	0.0	0.0	0.0	25
26	0.5	0.5	0.5	0.6	2	3	42	1.5	0.5	0.0	0.0	0.0	26
27	0.5	0.5	0.5	0.6	2	3	21	1.3	0.4	0.0	0.0	0.0	27
28	0.5	0.5	0.5	0.6	2	60	14	1.2	0.2	0.0	0.0	0.0	28
29	0.5	0.5	0.5	0.7		46	11	1.2	0.1	0.0	0.0	0.0	29
30	0.5	0.5	0.5	1.7		10	9	1.2	0.0	0.0	0.0	0.0	30
31	0.5		0.5	34.0a		7		1.0		0.0	0.0		31
MEAN	0.4	0.5	0.7	1.7	16	6.2	15	3.3	0.5	0.0	0.0	0.0	MEAN
MAX.	0.5	0.5	5.0	34.0	76	60	80	11	0.8	0.0	0.0	0.0	MAX.
MIN.	0.1	0.5	0.5	0.5	2.0	2.0	3.0	1.0	0.0	0.0	0.0	0.0	MIN.
AC.FT.	27.6	29.8	42.8	103	887	385	920	204	28.6	0.0	0.0	0.0	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *
a - Flow partially computed from reservoir outlet

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT.	MO	DAY	TIME	DISCHARGE	GAGE HT.	MO	DAY	TIME	ACRE-FEET
3.6	88		4	21		0.0					2627

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 18 28	120 11 35	SW23 7S 16E	590		12-24-55	FEB 50-DATE		1950		338.22	USCGS

Station located 0.25 mi. below Owens Dam. Tributary to San Joaquin River, via Mariposa Creek and Bear Creek. Flow regulated by Owens Reservoir. Records furn. by U.S.C.E. Drainage area is 25.6 sq. mi.

TABLE B-19

DAILY MEAN DISCHARGE

BEAR CREEK NEAR CATHAY

IN SECOND FEET

STATION NO	WATER YEAR
855400	1963

DAY	OCT.	NOV	DEC	JAN	FEB.	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	0.0	0.0	0.0	0.6	1060 E	2.0*	41	24	1.3	0.3	0.0	0.0	1
2	0.0*	0.0*	0.0	0.6	95	1.8	33	19	1.2	0.4	0.0	0.0	2
3	0.0	0.0	0.0	0.6	40	1.8	23	17	1.1	0.3	0.0	0.0	3
4	0.0	0.0	0.0	0.5	24	1.5	19	14	1.0	0.3	0.0	0.0	4
5	0.0	0.0	0.0*	0.5	15	1.4	17	12	0.8	0.3	0.0	0.0*	5
6	0.0	0.0	0.0	0.5	11	1.3	17	9.7	0.9	0.3	0.0*	0.0	6
7	0.0	0.0	0.0	0.5	8.0	1.2	34	8.6	0.9	0.2	0.0	0.0	7
8	0.0	0.0	0.0	0.4	5.7	1.2	36	12	0.9	0.2	0.0	0.0	8
9	0.0	0.0	0.0	0.5	40	1.4	28	19	0.8	0.3	0.0	0.0	9
10	0.0	0.0	0.0	0.4	290	1.4	21	11	0.8	0.3	0.0	0.0	10
11	0.0	0.0	0.0	0.3	61	1.3	18	14	0.8	0.3	0.0	0.0	11
12	0.0	0.0	0.0	0.3	41	1.2	15	11	0.9	0.2	0.0	0.0	12
13	0.0	0.0	0.0	0.3	374	1.0	13	8.7	0.8	0.2	0.0	0.0	13
14	0.0	0.0	0.0	0.3	154	1.2	312 E	7.6	0.7	0.2	0.0	0.0	14
15	0.0*	0.0	0.0	0.3*	58	2.6*	336	6.1	0.6	0.2	0.0	0.0	15
16	0.0	0.0*	24	0.3	33	3.7	114	5.2	0.6	0.2	0.0	0.0	16
17	0.0	0.0	8.6	0.3	22	29	60	4.7	0.5*	0.2	0.0	0.0	17
18	0.0	0.0	3.7	0.3	17	37	39	4.0	0.4	0.2	0.0	0.0	18
19	0.0	0.0	2.3	0.3	13	28	75	3.4	0.4	0.2	0.0	0.0*	19
20	0.0	0.0	1.7	0.2	11	18	219	3.3	0.4	0.2	0.0	0.0	20
21	0.0	0.0	1.3	0.3	8.0	14	248	2.8	0.4	0.1	0.0	0.0	21
22	0.0	0.0	1.1	0.3	6.4	18	108 *	2.5	0.4	0.1	0.0	0.0	22
23	0.0	0.0	0.9	0.2	5.4	66	63	2.4	0.3	0.1	0.0*	0.0	23
24	0.0	0.0	0.8	0.2	4.5	42	43	2.6*	0.3	0.1	0.0	0.0	24
25	0.0	0.0	0.7	0.2	3.5	27	37	2.7	0.3	0.1	0.0	0.0	25
26	0.0	0.0	0.6*	0.2	3.1	20	122	2.3	0.3	0.1	0.0	0.0	26
27	0.0	0.0	0.7	0.2	2.7	20	80	2.1	0.3	0.0	0.0	0.0	27
28	0.0	0.0	0.7	0.2	2.3	576 #	51	1.8	0.3	0.0	0.0	0.0	28
29	0.0	0.0	0.6	0.2		108	37	1.7	0.3	0.0	0.0	0.0	29
30	0.0	0.0	0.6	128		54	29	1.6	0.3	0.0	0.0	0.0	30
31	0.0		0.6	937 #		39		1.5		0.0	0.0		31
MEAN	0.0	0.0	1.6	34.7	86.0	36.2	76.3	7.7	0.6	0.2	0.0	0.0	MEAN
MAX.	0.0	0.0	24.0	937 E	1060 E	576 E	336	24.0	1.3	0.4	0.0	0.0	MAX
MIN.	0.0	0.0	0.0	0.2	2.3	1.0	13.0	1.5	0.3	0.0	0.0	0.0	MIN
AC.FT.			97	2132	4777	2225	4538	473	38	11			AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
19.7	3850 E	9.98	2	1	0220	0.0		10	1	0000	14290

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF. DATUM
37 28 38	120 06 43	SW21 5S 17E	3850E	9.98	2-1-63	DEC 57-DATE		1957		0.00	LOCAL

Station located at Co. Rd. bridge, 3.7 mi. N of Cathay School. Tributary to San Joaquin River. Drainage area is 24.6 sq. mi. Altitude of gage is approx. 1,210 ft. (From U.S.G.S. topographic map.)

TABLE B-20

DAILY MEAN DISCHARGE

BEAR CREEK BELOW BEAR RESERVOIR

IN SECOND FEET

STATION NO	WATER YEAR
B05570	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.0	3	1185	14	43	40	6	0.4	0.0	0.0	1
2	0.0	0.0	0.0	3	424	14	38	35	6	0.4	0.0	0.0	2
3	0.0	0.0	0.0	3	75	13	30	31	5	0.4	0.0	0.0	3
4	0.0	0.0	0.0	3	42	12	23	28	5	0.3	0.0	0.0	4
5	0.0	0.0	0.0	3	28	12	18	25	4	0.3	0.0	0.0	5
6	0.0	0.0	0.0	3	21	11	17	22	4	0.3	0.0	0.0	6
7	0.0	0.0	0.0	3	14	10	21	21	4	0.3	0.0	0.0	7
8	0.0	0.0	0.0	3	12	12	38	20	4	0.2	0.0	0.0	8
9	0.0	0.0	0.0	3	14	11	32	33	3	0.1	0.0	0.0	9
10	0.0	0.0	0.0	3	450	11	27	30	3	0.1	0.0	0.0	10
11	0.0	0.0	0.0	3	140	11	22	23	3	0.1	0.0	0.0	11
12	0.0	0.0	0.0	3	80	12	19	23	3	0.0	0.0	0.0	12
13	0.0	0.0	0.0	3	400	12	16	19	3	0.0	0.0	0.0	13
14	0.0	0.0	0.0	2	506	11	157	16	3	0.0	0.0	0.0	14
15	0.0	0.0	0.0	2	135	14	488	14	3	0.0	0.0	0.0	15
16	0.0	0.0	0.0	2	90	18	195	14	3	0.0	0.0	0.0	16
17	0.0	0.0	0.0	3	68	21	94	12	2	0.0	0.0	0.0	17
18	0.0	0.0	0.0	3	52	50	55	10	2	0.0	0.0	0.0	18
19	0.0	0.0	0.0	2	43	56	56	10	1	0.0	0.0	0.0	19
20	0.0	0.0	0.0	2	37	44	152	9	1	0.0	0.0	0.0	20
21	0.0	0.0	0.0	2	32	34	513	9	1	0.0	0.0	0.0	21
22	0.0	0.0	0.5	2	28	30	190	8	1	0.0	0.0	0.0	22
23	0.0	0.0	4	3	25	54	105	8	1	0.0	0.0	0.0	23
24	0.0	0.0	4	3	23	84	74	8	1	0.0	0.0	0.0	24
25	0.0	0.0	4	2	21	58	50	8	0.9	0.0	0.0	0.0	25
26	0.0	0.0	4	3	19	46	139	8	0.8	0.0	0.0	0.0	26
27	0.0	0.0	4	3	17	41	135	8	0.7	0.0	0.0	0.0	27
28	0.0	0.0	4	3	16	647	86	7	0.6	0.0	0.0	0.0	28
29	0.0	0.0	4	3		290	55	7	0.5	0.0	0.0	0.0	29
30	0.0	0.0	4	4		78	44	7	0.4	0.0	0.0	0.0	30
31	0.0		3	513		49		6		0.0	0.0		31
MEAN	0.0	0.0	1.2	19	143	57	98	17	2.5	0.9	0.0	0.0	MEAN
MAX.	0.0	0.0	4	513	1185	647	513	40	6	0.4	0.0	0.0	MAX
MIN.	0.0	0.0	0.0	2	12	10	16	6	0.4	0.0	0.0	0.0	MIN.
AC.FT.	0.0	0.0	70	1188	7932	3531	5816	1029	150	5.7	0.0	0.0	AC.FT

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN		MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
27.2	1320		2	1		0.0					19722

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 21 27	120 14 05	NE 5 7S 16E	4460		12-24-55	JAN 55-DATE		1955		320.50	USCGS

Station located approx. 0.75 mi. below Bear Dam. Tributary to San Joaquin River. Flow regulated by Bear Reservoir. Records furn. by U.S.C.E. Drainage area is 72 sq. mi.

TABLE B-21

DAILY MEAN DISCHARGE

BURNS CREEK AT HORNITOS

IN SECOND FEET

STATION NO	WATER YEAR
856400	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	0.0	0.0	0.0	0.0	252 #	1.4	8.1	17	0.6	0.1	0.0	0.0	1
2	0.0*	0.0	0.0	0.0	22	1.4	5.2	15	0.5	0.1	0.0	0.0	2
3	0.0	0.0	0.0	0.1	9.3	1.1	4.5	14	0.4	0.0*	0.0	0.1	3
4	0.0	0.0	0.0	0.1	6.0	1.0	3.9*	13	0.4*	0.0	0.0	0.0	4
5	0.0	0.0	0.0	0.1	4.4	1.0	3.7	12	0.3	0.0	0.0	0.0	5
6	0.0	0.0	0.0	0.1	3.0	1.0	4.0	11 *	0.3	0.0	0.0	0.0	6
7	0.0	0.0	0.0	0.1	2.6	0.9	4.8	11	0.3	0.0	0.0	0.0	7
8	0.0	0.0	0.0	0.1	2.1	1.0	3.9	13	0.3	0.0	0.0	0.0	8
9	0.0	0.0	0.0	0.1	103 E	1.1	3.2	16	0.2	0.0	0.0	0.0	9
10	0.0	0.0	0.0	0.1	118 *	1.0	3.0	13	0.1	0.0	0.0	0.0	10
11	0.0	0.0	0.0	0.1	12	0.9	2.9	14	0.1	0.0	0.0	0.0	11
12	0.0	0.0	0.0	0.1	29	0.9	2.5	11	0.1	0.0	0.0	0.0	12
13	0.0	0.0	0.0	0.1	231	0.8	2.2	7.2	0.1	0.0	0.0	0.0	13
14	0.1	0.0	0.0	0.1	43	1.0	71	4.0	0.1	0.0	0.0	0.0	14
15	0.0	0.0	0.1	0.1*	14	1.4*	70	1.7	0.1	0.0	0.0	0.0	15
16	0.0	0.0	5.0	0.1	8.9	1.9	15	1.5	0.1	0.0	0.0	0.0	16
17	0.0	0.0	0.5	0.1	6.2	1.9	8.6	1.4	0.1	0.0	0.0	0.0	17
18	0.0	0.0	0.2	0.1	4.9	1.5	6.1	1.2	0.1	0.0	0.0	0.0	18
19	0.0	0.0	0.2	0.2	4.2	1.1	13	1.0	0.1	0.0	0.0	0.0	19
20	0.0	0.0	C.1	0.2	3.6	1.0	219 E	1.0	0.1	0.0	0.0	0.0	20
21	0.0	0.0	0.1	0.2	3.1	1.0	127	1.0	0.1	0.0	0.0	0.0	21
22	0.0	0.0	0.1	0.2	2.8	3.5	28	1.0	0.1	0.0	0.0	0.0	22
23	0.0	0.0	0.1	0.1	2.3	6.0	15	0.9	0.1	0.0	0.0	0.0	23
24	0.0	0.0	0.1	0.2	2.0	2.8	9.8	0.9	0.1	0.0	0.0	0.0	24
25	0.0	0.0	0.1	0.2	1.7	2.3	8.9	0.9	0.1	0.0	0.0	0.0	25
26	0.0	0.0	0.1*	0.2	1.6	2.2	40	0.9	0.1	0.0	0.0	0.0	26
27	0.0	0.0	0.1	0.2	1.6	9.5	13	0.9	0.1	0.0	0.0	0.0	27
28	0.0	0.0	0.1	0.2	1.4	287 E	8.4	0.8	0.1	0.0	0.0	0.0	28
29	0.0	0.0	0.1	0.3		21	6.6	0.8	0.1	0.0	0.0	0.0	29
30	0.0	0.0	0.1	1.0		10	5.7	0.7	0.1	0.0	0.0	0.0	30
31	0.0		0.0	99 #		8.0		0.6		0.0	0.0		31
MEAN	0.0	0.0	0.2	3.3	32.0	12.1	23.9	6.1	0.2	0.0	0.0	0.0	MEAN
MAX.	0.1	0.0	5.0	99.0E	252 E	287 E	219 E	17.0	0.6	0.1	0.0	0.1	MAX
MIN.	0.0	0.0	0.0	0.0	1.4	0.8	2.2	0.6	0.1	0.0	0.0	0.0	MIN.
AC.FT.			14	206	1777	747	1422	374	11				AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
\# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
6.3	1340 E	6.93	4	20	1610	0.0		10	1	0000	4551

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 29 42	120 14 17	SE17 5S 16E	4340E	10.66	2-15-62	DEC 58-DATE	DEC 58-DATE	1958		0.00	LOCAL

Station located 130 ft. S of Stockton-Mariposa Road, 0.2 mi. SW of Hornitos. Drainage area is 26.7 sq. mi. Maximum discharge from slope-area measurement. Altitude of gage is approx. 780 ft. (From U.S.G.S. topographic map)

TABLE B-22

DAILY MEAN DISCHARGE

BURNS CREEK BELOW BURNS RESERVOIR
IN SECOND FEET

STATION NO	WATER YEAR
B56400	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.0	0.0	260	4	14	10	0.5	0.0	0.0	0.0	1
2	0.0	0.0	0.0	0.0	63	4	11	9	0.5	0.0	0.0	0.0	2
3	0.0	0.0	0.0	0.0	16	4	8	8	0.5	0.0	0.0	0.0	3
4	0.0	0.0	0.0	0.0	7	3	7	8	0.5	0.0	0.0	0.0	4
5	0.0	0.0	0.0	0.0	5	4	6	7	0.5	0.0	0.0	0.0	5
6	0.0	0.0	0.0	0.0	4	4	6	6	0.0	0.0	0.0	0.0	6
7	0.0	0.0	0.0	0.0	3	4	6	6	0.0	0.0	0.0	0.0	7
8	0.0	0.0	0.0	0.0	3	3	6	5	0.0	0.0	0.0	0.0	8
9	0.0	0.0	0.0	0.0	80	3	6	6	0.0	0.0	0.0	0.0	9
10	0.0	0.0	0.0	0.0	364	3	5	7	0.0	0.0	0.0	0.0	10
11	0.0	0.0	0.0	0.0	58	3	5	6	0.0	0.0	0.0	0.0	11
12	0.0	0.0	0.0	0.0	60	3	4	6	0.0	0.0	0.0	0.0	12
13	0.0	0.0	0.0	0.0	494	2	4	5	0.0	0.0	0.0	0.0	13
14	0.0	0.0	0.0	0.0	246	2	7	5	0.0	0.0	0.0	0.0	14
15	0.0	0.0	0.0	0.0	66	4	106	4	0.0	0.0	0.0	0.0	15
16	0.0	0.0	1.9	0.0	46	4	59	4	0.0	0.0	0.0	0.0	16
17	0.0	0.0	1.4	0.0	31	4	20	3	0.0	0.0	0.0	0.0	17
18	0.0	0.0	0.9	0.0	20	4	10	2	0.0	0.0	0.0	0.0	18
19	0.0	0.0	0.5	0.0	15	4	8	2	0.0	0.0	0.0	0.0	19
20	0.0	0.0	0.4	0.0	11	4	87	2	0.0	0.0	0.0	0.0	20
21	0.0	0.0	0.2	0.0	9	4	427	1.5	0.0	0.0	0.0	0.0	21
22	0.0	0.0	0.2	0.0	8	3	100	1.5	0.0	0.0	0.0	0.0	22
23	0.0	0.0	0.1	0.0	7	3	54	1.5	0.0	0.0	0.0	0.0	23
24	0.0	0.0	0.1	0.0	6	4	34	1.5	0.0	0.0	0.0	0.0	24
25	0.0	0.0	0.0	0.0	6	5	22	1.5	0.0	0.0	0.0	0.0	25
26	0.0	0.0	0.0	0.0	5	5	79	1.5	0.0	0.0	0.0	0.0	26
27	0.0	0.0	0.0	0.0	5	5	70	1.5	0.0	0.0	0.0	0.0	27
28	0.0	0.0	0.0	0.0	4	339	31	1.5	0.0	0.0	0.0	0.0	28
29	0.0	0.0	0.0	0.0		79	18	1.5	0.0	0.0	0.0	0.0	29
30	0.0	0.0	0.0	0.0		32	14	1.0	0.0	0.0	0.0	0.0	30
31	0.0		0.0	79		17		1.0		0.0	0.0		31
MEAN	0.0	0.0	0.2	2.5	68	18	41	4.1	0.1	0.0	0.0	0.0	MEAN
MAX	0.0	0.0	1.9	79	494	339	427	10	0.5	0.0	0.0	0.0	MAX.
MIN.	0.0	0.0	0.0	0.0	3	2	4	1.0	0.0	0.0	0.0	0.0	MIN.
AC.FT.	0.0	0.0	11	157	3773	1123	2448	251	5	0.0	0.0	0.0	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
10.7	890		3	28		0.0					7768

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37 22 27	120 16 35	NE36 6S 15E	2590		12-24-55	APR 50- DATE		1950		260.60	USCGS

Station located 0.5 mi. below Burns Dam. Tributary to San Joaquin River via Bear Creek. Flow regulated by Burns Reservoir. Records furn. by U.S.C.E. Drainage area is 73.8 sq. mi.

TABLE B-23

DAILY MEAN DISCHARGE

SAN JOAQUIN RIVER NEAR STEVINSON

IN SECOND FEET

STATION NO	WATER YEAR
807400	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR.	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	22	9.1	12	16	177	97	659	881	115	61	55	53	1
2	25	9.1	9.0	15	515	90	591	581	124	67	54	54	2
3	23	9.2	7.9	15	1590	83	458	441	127	78	51	54	3
4	21	20	7.7	15	2120 *	77	349	339	127	89	56	53	4
5	32	30	7.7	13	1630	74	234	326	120	100	60	54	5
6	36	30	7.9	11	1020	67	229	249	120	104	66	55	6
7	33	22	7.7	40	579	60	356	212	128	104	71	54	7
8	28	17	7.9	87	298	56	390	180	134	95	74	50	8
9	23	12	8.3	96	190	51	371	161	143	92	73	47	9
10	17	11	8.3	88	403	48	339	149	135	97	70	43	10
11	17	12	8.5	75	722	45	400	145	144	91	66	42	11
12	17	14	8.3	54	1040	42	456 *	258	137	81 *	69	43	12
13	20	14	8.7	62	1230	40	445	261	146	72	71	47	13
14	17	14	9.0	64	1490	39	412	205	164	67	68	62	14
15	14	13 *	9.9	61	1960	38	393	196	164	72	69	77	15
16	14	13	17	47	1930	41	644	184	151	71	65	83	16
17	13	13	21	35 *	1370	40	920	167	150	61	61	82	17
18	13 *	13	34	29	932	49	1140	142	145	58	58	78 *	18
19	12	8.9	38 *	24	648	59	1080	124	123	56	56	94	19
20	12	7.8	39	23	464	57	916	106	99 *	58	59	106	20
21	11	9.3	39	22	354	52 *	905	99 *	83	61	56	125	21
22	10	12	37	20	279	52	1120	96	75	61	54 *	141	22
23	10	11	35	19	193	53	1530	91	73	53	50	145	23
24	10	10	33	20	162	79	1700	90	76	51	53	143	24
25	11	8.9	31	27	144	103	1580	97	88	52	59	112	25
26	11	9.3	29	23	131	87	1370	95	93	54	65	114	26
27	11	11	23	18	116	91	1200	101	90	56	74	91	27
28	11	11	19	16	106	103	1180	111	79	53	79	80	28
29	10	11	18	17		252	1160	122	75	52	66	73	29
30	9.5	12	16	23		765	1070	127	67	52	58	70	30
31	9.2		15	51		775		126		56	54		31
MEAN	16.9	13.3	18.5	36.3	778	115	787	209	117	70.2	62.6	77.5	MEAN
MAX.	36.0	30.0	39.0	96.0	2120	775	1700	881	164	104	79.0	145	MAX
MIN.	9.2	7.8	7.7	11.0	106	38.0	229	90.0	67.0	51.0	50.0	42.0	MIN.
AC.FT.	1037	789	1136	2233	43230	7071	46800	12820	6932	4314	3848	4612	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
186	2190	68.94	2	4	1040	7.3	60.66	11	20	1840	134800

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 17 42	120 51 00	26 7S 10E	6060	73.04	2-17-62	OCT 61-DATE		1961		0.00	USCGS

Station located on bridge 2.3 miles south of Stevinson on Lander Avenue.

TABLE B-24

DAILY MEAN DISCHARGE

PANOCHE DRAIN NEAR DOS PALOS

IN SECOND FEET

STATION NO	WATER YEAR
B00975	1963

DAY	OCT	NOV	DEC.	JAN	FEB.	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1													1
2				6.5**				20.6**		56.2**			2
3													3
4													4
5			8.4**										5
6					19.1**				39.6**				6
7		12.2**											7
8													8
9													9
10													10
11													11
12													12
13	17.8**												13
14													14
15													15
16													16
17													17
18													18
19						29.9**							19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27					34.1**								27
28													28
29													29
30													30
31													31
MEAN													MEAN
MAX													MAX
MIN.													MIN.
AC.FT.													AC.FT

INSUFFICIENT DATA TO PUBLISH DAILY FLOWS

STATION DISCONTINUED AS OF

7-2-63

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day.
‡ – E and *
** – Result of discharge measurement.

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO.	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
		8.12	2	11	0700						NR

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 55 25	120 41 19	NW 5 12S 12E		8.12	2/11/63	FEB 59-SEP 62	FEB 59-JUL 63	1959		0.00	LOCAL

Station located midway between outside and main canals 0.5 mi. S of main canal levee road, 5.6 mi. SW of Dos Palos. This is drainage returned to San Joaquin River. Gage sometimes affected by backwater due to inadequate drainage facilities. Station discontinued 7-2-63.

TABLE B-25

DAILY MEAN DISCHARGE

NORTH FORK MERCED RIVER NEAR COULTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
852600	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.3	0.6	0.5	0.6	1100 E	6.7*	35	34	11	2.8	1.4	1.1	1
2	0.2	0.6	0.6	0.6	151	6.6	27	30	10	2.6	1.4	1.1	2
3	0.2*	0.4	0.7*	0.5	49	6.6	23	28	9.7	2.7*	1.4	1.0	3
4	0.2	0.4	0.8	0.5*	26	6.4	19 *	25	9.2*	2.6	1.4	0.8*	4
5	0.3	0.5*	0.7	0.4	17	6.4	17	23	9.1	2.4	1.4	0.8	5
6	0.3	1.0	0.7	0.4	13	6.3	24	23 *	8.9	2.4	1.4	1.0	6
7	0.4	0.9	0.9	0.4	10	6.1	39	22	8.7	2.3	1.3	0.9	7
8	0.5	0.8	0.9	0.4	9.2	5.9	38	30	8.2	2.4	1.3	0.8	8
9	0.5	0.8	0.9	0.5	11	6.8	34	32	7.6	2.3	1.3	0.9	9
10	0.6	0.6	1.0	0.4	25	6.3	31	29	7.9	2.1	1.3	0.8	10
11	0.7	0.5	1.0	0.4	15	6.3	27	45	8.3	2.1	1.4	0.9	11
12	0.8	0.4	1.1	0.4	14	6.3	24	42	7.2	2.1	1.4	0.8	12
13	1.0	0.4	1.2	0.4	44 *	5.8	21	35	6.9	2.1	1.4	1.0	13
14	1.0	0.4*	1.3	0.4	51	6.3	145	30	6.8	1.8	1.0E	1.0	14
15	0.5*	0.5	2.0	0.4	30	7.6	207	26	5.8	1.7	1.0E	1.0	15
16	0.6	0.6	8.0	0.4	20	9.0	122	24	5.4	1.6	0.9E	0.8	16
17	0.8	0.7	1.9	0.4	16	11	74	21	5.0	1.6	0.9E	0.8	17
18	1.1	0.9	1.5*	0.4	13	9.9	55	20	4.6	1.5	0.9E	0.8	18
19	1.4	1.1	1.3	0.3	11	11	79	19	4.3	1.5*	0.8E	0.9*	19
20	1.6	1.2	1.0	0.3	9.4	13	94	18	3.9	1.4	0.8E	0.9	20
21	1.6	1.3	1.2	0.3	8.4	13	104	16	3.7	1.5	0.8E	1.0	21
22	1.7	1.5	1.2	0.3	8.1	14	110 *	16	4.0	1.5	0.8#	0.9	22
23	1.9	1.6	1.2	0.3	8.1	26	111	15	4.0	1.5	0.7E	1.1	23
24	1.9	1.7	1.0	0.4	7.7	32	96	15	3.7	1.4	0.7E	1.1	24
25	2.0	1.7	1.0	0.4	7.7	24	79	15	3.5	1.3	0.6E	1.1	25
26	2.2	1.9	0.9	0.5	7.2	19	69	14	3.2	1.3	0.6#	1.2	26
27	2.2	1.1	0.9	0.5	6.9	22	57	13	3.0	1.3	0.6E	1.2	27
28	2.3	0.6	0.8	0.5	6.9	212 *	49	13	3.1	1.3	0.5#	1.1	28
29	1.1	0.8	0.8	0.7		117	43	13	2.9	1.3	0.8	1.1	29
30	0.4	0.4	0.7	186 *		60	39	12	2.9	1.4	1.0	1.1	30
31	0.5		0.7	1690 #		41		11		1.5	1.0		31
MEAN	1.0	0.9	1.2	60.9	60.6	23.6	63.1	22.9	6.1	1.8	1.0	1.0	MEAN
MAX.	2.3	1.9	8.0	1690 E	1100 E	212	207	45.0	11.0	2.8	1.4	1.2	MAX
MIN.	0.2	0.4	0.5	0.3	6.9	5.8	17.0	11.0	2.9	1.3	0.5E	0.8	MIN
AC.FT.	61	51	76	3746	3363	1449	3753	1406	362	114	64	58	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
20.0	NR					NR					14500

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37 44 51	120 02 12	NW19 2S 18E	3440	7.83	1-31-63	DEC 58-DATE		1958		0.00	LOCAL

Station located 40 ft. above Greeley Hill Road Bridge, 9 mi. NE of Coulterville. Drainage area is 30.3 sq. mi. Altitude of gage is 2,360 ft. (from U.S.G.S. topographic map.)

TABLE B-26

DAILY MEAN DISCHARGE

MAXWELL CREEK AT COULTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
851250	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.0	0.2	279 E	1.5*	18	9.8	2.2	0.4	0.0	0.0	1
2	0.0	0.1	0.0	0.2	14	1.4	15	9.4	2.3	0.4	0.0	0.0	2
3	0.0*	0.1	0.0	0.2	5.0	1.5	12	8.5	2.0	0.3*	0.0	0.0	3
4	0.0	0.1	0.0	0.2	3.0	1.3	8.0	7.9	2.0*	0.3	0.0	0.0	4
5	0.0	0.0	0.0	0.2	2.3	1.4	6.5	7.0	1.9	0.3	0.0	0.0	5
6	0.0	0.0	0.0	0.2	1.8	1.5	8.5	6.8*	1.9	0.3	0.0	0.0	6
7	0.0	0.0	0.0	0.3	1.5	1.4	14	6.3	1.8	0.3	0.0	0.0	7
8	0.0	0.0	0.0	0.3	1.4	1.3	11	9.8	1.6	0.3	0.0	0.0	8
9	0.0	0.0	0.0	0.3	5.0	1.5	8.9	9.6	1.5	0.2	0.0	0.0	9
10	0.0	0.0	0.0	0.2	49	1.3	7.6	10	1.6	0.2	0.0	0.0	10
11	0.0	0.0	0.0	0.2	7.9	1.2	6.9	35	1.7	0.1	0.0	0.0	11
12	0.0	0.0	0.0	0.2	5.5	1.3	5.9	20	1.8	0.2	0.0	0.0	12
13	0.0	0.0	0.0	0.2	97	1.1	5.5	15	1.8	0.2	0.0	0.0	13
14	0.3	0.0	0.1	0.2	38	1.3	106	12	1.6	0.1	0.0	0.0	14
15	0.0	0.0	0.2	0.2*	11	1.7	139	9.9	1.3	0.1	0.0	0.0	15
16	0.0	0.0	6.1	0.2	6.2	2.8	50	7.7	1.2	0.1	0.0	0.0	16
17	0.0	0.0	1.3	0.2	4.6	6.1	26	7.1	1.1	0.1	0.0	0.0	17
18	0.0	0.0	0.6*	0.2	3.4	6.3	18	6.3	1.0	0.1	0.0	0.0	18
19	0.0	0.0	0.5	0.2	2.9	6.3	56	5.2	0.9	0.1*	0.0	0.0	19
20	0.0	0.0	0.4	0.2	2.6	8.6	88	4.6	0.9	0.0	0.0	0.0	20
21	0.0	0.0	0.3	0.2	2.2	8.2	124	4.3	0.9	0.0	0.0	0.0	21
22	0.0	0.0	0.3	0.2	1.9	9.3	94 *	4.0	1.0	0.0	0.0	0.0	22
23	0.0	0.0	0.3	0.2	1.9	34	51	3.8	0.9	0.0	0.0	0.0	23
24	0.0	0.0	0.2	0.3	1.8	18	31	3.5	0.8	0.0	0.0	0.0	24
25	0.0	0.0	0.2	0.2	1.6	9.8	23	3.4	0.7	0.0	0.0	0.0	25
26	0.1	0.0	0.2	0.3	1.6	6.4	27	2.9	0.6	0.0	0.0	0.0	26
27	0.1	0.1	0.3	0.3	1.6	9.1	19	2.7	0.6	0.0	0.0	0.0	27
28	0.0	0.0	0.2	0.3	1.5	263 #	16	2.8	0.5	0.0	0.0	0.0	28
29	0.1	0.0	0.2	0.3		47	14	2.8	0.6	0.0	0.0	0.0	29
30	0.1	0.0	0.2	52 *		20	12	2.2	0.5	0.0	0.0	0.0	30
31	0.1		0.2	331 #		15		2.0		0.0	0.0		31
MEAN	0.0	0.0	0.4	12.6	19.8	15.8	34.1	7.8	1.3	0.1	0.0	0.0	MEAN
MAX.	0.3	0.1	6.1	331 E	279 E	263 E	139	35.0	2.3	0.4	0.0	0.0	MAX.
MIN.	0.0	0.0	0.0	0.2	1.4	1.1	5.5	2.0	0.5	0.0	0.0	0.0	MIN.
AC.FT.	2	1	23	773	1101	973	2027	481	78	8			AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day
# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
7.6	1300 E	5.47	1	31	2330	0.0		10	1	0000	5466

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 42 58	120 11 20	SE34 2S 16E	1720E[a]	5.73	2- 8-60	DEC 58-DATE		1958		0.00	LOCAL

Station located below Dogtown Road Bridge, 0.5 mi. NE of Coulterville. Tributary to Merced River. Drainage area is 17.0 sq. mi. Altitude of gage is 1740 ft. (from topographic map.)

a-Previously reported as 956 cfs. After obtaining additional high flow discharge measurements, the stage-discharge relation for high flows was more closely defined. See Table B-1 for additional information.

TABLE B-27

DAILY MEAN DISCHARGE

MERCED RIVER BELOW SNELLING

IN SECOND FEET

STATION NO	WATER YEAR
B05170	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	61	8.6	7.5	9.9	177	1510	868	887	2880	132	84	65	1
2	16	7.8	7.6	9.7	61	499	862	892	2900	140	85	70	2
3	8.8	8.6	7.8	9.2	38	67	875	882	3270	149	84	62	3
4	7.2	11	9.7	8.5	32	55	857	873	3000	164	86	61	4
5	6.1	11	9.4	10	31	48	831	780	1750	147	85	64	5
6	6.7	12	9.4	14	766	45	971	558	1740	84	76	68	6
7	8.4	12	9.2	17	552	42	1080	743	1490	72	73	61	7
8	8.0	11	8.8	18	1440	50	978	1540	987	76	84	60	8
9	7.1	10	9.9	18	1520	99	868	3150 *	1190	73	81	66	9
10	6.3	10	9.2	17	1630	107	679	4630	1060	72	82	61	10
11	6.3	9.9	9.6	17	1510	82	664	3930	203	80	85	59	11
12	6.4	9.2	11	16	1510	68	676	3420	165	81 *	85	56	12
13	7.7	8.8	9.3	17	1730	63	670	1970	145	77	85	75	13
14	11	7.9	11	16	1550	64	851	1250	145	77	87	66	14
15	11	6.9*	29	17	1530 *	65	856	1090	139	78	91	66	15
16	13	6.9	45	17	1510	64	829	1190	792	80	85	67	16
17	15	6.8	33	18 *	1510	69	733 *	2440	3010	86	88	69 *	17
18	14	7.4	25 *	19	1500	74	859	3530	2930	98	85	81	18
19	11 *	8.0	21	23	1500	62 *	990	3720	2940	104	73	76	19
20	12	7.6	20	24	1500	54	974	3960	2300 *	100	70	63	20
21	12	7.5	19	24	1500	48	946	4030	2230	101	56	60	21
22	11	7.6	18	24	1510	46	893	4110	1390	104	68	60	22
23	11	7.9	17	25	1490	42	896	4230	901	108	72 *	61	23
24	9.8	7.8	17	25	1490	42	1270	4120	758	112	76	63	24
25	9.3	8.3	16	25	1490	41	1450	2830	428	107	75	48	25
26	9.3	8.7	14	26	1500	42	1720	2730	262	107	70	45	26
27	8.6	10	12	25	1490	44	1580	3690	347	96	71	41	27
28	8.4	8.3	10	24	1500	311	1420	3990	447	92	61	42	28
29	8.6	7.4	10	25		1130	1180	3070	403	91	61	38	29
30	8.1	7.7	10	32		1020	1090	2890	195	97	64	38	30
31	8.7		10	100		875		2700		93	62		31
MEAN	11.2	8.8	14.7	21.6	1199	220	981	2575	1347	99.3	77.1	60.4	MEAN
MAX.	61.0	12.0	45.0	100	1730	1510	1720	4630	3270	164	91.0	81.0	MAX
MIN.	6.1	6.8	7.5	8.5	31.0	41.0	664	558	139	72.0	56.0	38.0	MIN.
AC.FT.	690	521	903	1330	66580	13540	58350	158300	80130	6105	4740	3594	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
545	4910	12.51	5	10	0510	5.7	4.85	10	5	2400	394800

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF. DATUM
37 30 06	120 27 03	NE17 5S 14E	4910	12.51	5-10-63	NOV 58-DATE		1958		0.00	LOCAL

Station located 0.2 mi. below Merced-Snelling Highway Bridge, 1.4 mi. SW of Snelling. Flow regulated by Exchequer power plant and Lake McClure. Prior to November, 1958, records available for a site 3.6 mi. downstream. Altitude of gage is 221 feet, USGS datum.

[illegible]

[illegible] MEAN DISCHARGE

[illegible]

[illegible]

DAY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1–31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	340	31	105	771	[illegible]	[illegible]	[illegible]	[illegible]
MAX	17	[illegible]	12	13	442	353	359	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	535	[illegible]	465	999	[illegible]	[illegible]	5779	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

WATER YEAR SUMMARY

MEAN	MAXIMUM			MINIMUM			TOTAL
DISCHARGE	DISCHARGE	[illegible]	[illegible]	DISCHARGE	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE		
LATITUDE	LONGITUDE	[illegible]	[illegible]	[illegible]	[illegible]	DISCHARGE	[illegible]	PERIOD	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

TABLE B-29

DAILY MEAN DISCHARGE

ORESTIMBA CREEK NEAR CROWS LANDING

IN SECOND FEET

STATION NO	WATER YEAR
B08720	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG.	SEPT	DAY
1	2.8	0.0*	0.0	0.0	1880 #	0.0	60	68	29	8.7	14	10	1
2	1.8	0.0	0.0	0.0	359 *	0.0	39	21	22	6.4	13	24	2
3	1.8	0.0	0.0*	0.0*	101	0.0	71	9.6	12	13	11	12	3
4	1.3	0.0	0.0	0.0	27 *	0.0	55	6.7	1.9	9.4	16	12	4
5	1.1	0.0	0.0	0.0	5.6	0.0	23	4.4	2.8	8.4	26	12	5
6	1.7	2.1	0.0	0.0	0.9	0.0*	26	5.2	1.9	11	12	23	6
7	0.7	0.1	0.0	0.0	0.0	0.0	264	16	1.4	15	11	29	7
8	0.4	0.0	0.0	0.0	0.0	0.0	158	6.3	2.1	27	12	31	8
9	0.4	0.0	0.0	0.0	0.0	0.0	96 *	11	4.0	25	9.7	18	9
10	0.3	6.1	0.0	0.0	57	12	67	6.4	10	8.5	9.9	8.9	10
11	0.1	2.2	0.0	0.0	40	21	65	5.7	24	6.5	8.2	6.5	11
12	0.2	0.2	0.0	0.0	15	1.2	104	6.8	20	11	11	11	12
13	0.1	0.0	0.0	0.0	399	2.3	109	8.0	25	18	13	20	13
14	0.1	3.5	0.0	0.0	314 *	4.4	113	8.4	7.1	14	13	16	14
15	0.0	2.9*	0.0	0.0	127	3.3	73	6.6	2.4	7.6	18	9.2	15
16	0.0	0.7	0.0	0.0	62	41	76	8.4*	2.5	8.4	12	5.7	16
17	0.0	0.1	0.0*	0.0	31	85	101	12	2.6	8.2*	16	5.7	17
18	0.0*	0.0	0.0	0.0*	16	11	76	10	3.5	8.2	14	7.2*	18
19	0.0	0.0	0.0	0.0	6.8	1.7	74 *	8.5	2.2*	9.3	25	8.5	19
20	0.0	0.0	0.0	0.0	2.1	0.9*	88	8.5	1.0	13	16 *	7.8	20
21	0.0	0.0	0.0	0.0	1.5	13	141	9.5	1.9	13	12	8.8	21
22	0.0	0.0	0.0	0.0	0.0	49	123	13	2.5	13	12	8.1	22
23	0.0	0.8	0.0	0.0	0.0	101	128	6.5	3.0	13	11	6.4	23
24	0.0	3.0	0.0	0.0	0.0	55	84	12	5.1	15	12	11	24
25	0.0	0.7	0.0	0.0	0.0	104	55	42	4.8	12	9.7	7.4	25
26	0.0	0.2	0.0	0.0	0.0	55	80	29	2.6	12	8.7	6.0	26
27	0.0	0.1	0.0	0.0	0.0	49	108	37	2.3	10	7.9	5.6	27
28	0.0	0.0	0.0	0.0	0.0	137	96	47	1.8	11	9.4	7.7	28
29	0.0	0.0	0.0	0.0		251	105	22	2.2	13	14	6.6	29
30	0.0	0.0	0.0	0.0*		92	111	53	2.5	14	13	5.3	30
31	0.0		0.0	361		65		39		14	9.4		31
MEAN	0.4	0.8	0.0	11.6	123	37.3	92.3	17.7	6.9	12.1	12.9	11.7	MEAN
MAX	2.8	6.1	0.0	361	1880 E	251	264	68.0	29.0	27.0	26.0	31.0	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	23.0	4.4	1.0	6.4	7.9	5.3	MIN.
AC.FT.	25	45		716	6833	2291	5492	1086	409	747	793	695	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT.	MO	DAY	TIME	ACRE-FEET
26.4	2650 E	12.08	2	1	0730	0.0		10	12	2210	19130

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37 24 59	121 00 45	SW 8 6S 9E	2650E	12.08	2- 1-63	DEC 57-DATE	Dec 57-DATE	1957		0.00	LOCAL

Station located 0.1 mi. below River Road Bridge, 3.7 mi. NE of Crows Landing. This includes drainage returned to San Joaquin River. Daily flows are estimated during periods of backwater from San Joaquin River. Altitude of gage is approximately 50 feet (from USGS topographic map).

TABLE B-28

DAILY MEAN DISCHARGE

MERCED RIVER AT CRESSEY

IN SECOND FEET

STATION NO	WATER YEAR
805155	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	174	63	59	74	450	1530	906	991	3070	258	86	91	1
2	177	61	59	76	502	1320	916	923	3130	173	92	95	2
3	154	62	59	77	241	449	916	909	3270	187	95	92	3
4	134	62	55	78	162	255	922	895	3510	207	102	99	4
5	118	62	58	76	129	175	883	883	2440	218	114	97	5
6	109	61	60	78	97	170	914	735	2060	214 E	102	97	6
7	101	59	60	79	980	162	1090	520	2060	168 E	85	88	7
8	95	61	60	83	828	142	1080	1110	1590	128	66	85	8
9	96	62	73	82	1510	138	930	1810 *	1250	97	68	85	9
10	91	61	69	83 E	2270	151	822	4400	1820	90	79	84	10
11	93	62	63	83 E	1790	188	732	4150	796	91	94	86	11
12	89	60	62	84 E	1670	179	710	3700	445	83 *	100	76	12
13	89	58	62	83 E	2120	156	707	2890 *	354	81	76	95	13
14	88	59	61	84 E	2420	144	744	1770	304	82	71	94	14
15	86	60 *	62	83 E	1760 *	149	890	1590	261	89	72	105	15
16	86	59	94	84 E	1680	155	909	1520	256	90	82	101	16
17	81	56	122	83 #	1640	170	882 *	1950	2010	85	89	111	17
18	78	56	120 *	83	1630	164	827	3510	2950	85	102	111 *	18
19	75 *	56	107	83	1610	159 *	919	3850	2990	70	101	123	19
20	74	54	92	84	1600	148	992	4090	2570 *	93	88	145	20
21	72	55	86	83	1590	141	1180	4250	2370 E	101	82	148	21
22	69	55	83	84	1580	139	1060	4300 *	2060 E	107	85 *	136	22
23	68	61	82	82	1560	140	993	4420	1790 E	113	87	133	23
24	68	60	87	82	1540	130	1060	4410	1450 E	109	92	141	24
25	70	60	81	74	1540	122	1300	3790	1180 E	101	104	142	25
26	72	61 *	80	89	1540	120	1490	2970	731 E	100	104	141	26
27	71	64	79	100	1540	121	1550	3520	444 E	105	118	130	27
28	69	60	78	82	1540	158	1430	4160	508	94	97	126	28
29	95	59	79	76		750	1280	3750	593	93	78	126	29
30	64	58	81	75		1100	1110	3210	458	88	74	114	30
31	65		78	123		927		3060		90	78		31
MEAN	92.6	59.6	75.8	82.9	1340	321	1005	2711	1624	119	89.1	110	MEAN
MAX	177	64.0	122	123	2420	1530	1550	4420	3510	258	118	148	MAX
MIN.	64.0	54.0	55.0	74.0	97.0	120	707	520	256	70.0	66.0	76.0	MIN.
AC.FT.	5695	3544	4663	5098	74420	19740	59790	166700	96640	7319	5480	6540	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
629	4590	19.56	5	10	1430	34.0	9.86	7	19	1740	455600

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 25 28	120 39 47	SW 9 6S 12E	34400	22.67	12- 4-50	JUL 41-DEC 41 JUL 42-DATE	APR 41-DATE	1950		96.24	USCGS

Station located 150 ft. below McSwain Bridge, immediately N of Cressey. Prior to May 20, 1960, station located 250 ft. upstream. Altitude of gage is approximately 85 ft. (USC & GS datum)

TABLE B-29

DAILY MEAN DISCHARGE

ORESTIMBA CREEK NEAR CROWS LANDING

IN SECOND FEET

STATION NO	WATER YEAR
B08720	1963

DAY	OCT.	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	2.8	0.0*	0.0	0.0	1880 #	0.0	60	68	29	8.7	14	10	1
2	1.8	0.0	0.0	0.0	359 *	0.0	39	21	22	6.4	13	24	2
3	1.8	0.0	0.0*	0.0*	101	0.0	71	9.6	12	13	11	12	3
4	1.3	0.0	0.0	0.0	27 *	0.0	55	6.7	1.9	9.4	16	12	4
5	1.1	0.0	0.0	0.0	5.6	0.0	23	4.4	2.8	8.4	26	12	5
6	1.7	2.1	0.0	0.0	0.9	0.0*	26	5.2	1.9	11	12	23	6
7	0.7	0.1	0.0	0.0	0.0	0.0	264	16	1.4	15	11	29	7
8	0.4	0.0	0.0	0.0	0.0	0.0	158	6.3	2.1	27	12	31	8
9	0.4	0.0	0.0	0.0	0.0	0.0	96 *	11	4.0	25	9.7	18	9
10	0.3	6.1	0.0	0.0	57	12	67	6.4	10	8.5	9.9	8.9	10
11	0.1	2.2	0.0	0.0	40	21	65	5.7	24	6.5	8.2	6.5	11
12	0.2	0.2	0.0	0.0	15	1.2	104	6.8	20	11	11	11	12
13	0.1	0.0	0.0	0.0	399	2.3	109	8.0	25	18	13	20	13
14	0.1	3.5	0.0	0.0	314 *	4.4	113	8.4	7.1	14	13	16	14
15	0.0	2.9*	0.0	0.0	127	3.3	73	6.6	2.4	7.6	18	9.2	15
16	0.0	0.7	0.0	0.0	62	41	76	8.4*	2.5	8.4	12	5.7	16
17	0.0	0.1	0.0*	0.0	31	85	101	12	2.6	8.2*	16	5.7	17
18	0.0*	0.0	0.0	0.0*	16	11	76	10	3.5	8.2	14	7.2*	18
19	0.0	0.0	0.0	0.0	6.8	1.7	74 *	8.5	2.2*	9.3	25	8.5	19
20	0.0	0.0	0.0	0.0	2.1	0.9*	88	8.5	1.0	13	16 *	7.8	20
21	0.0	0.0	0.0	0.0	1.5	13	141	9.5	1.9	13	12	8.8	21
22	0.0	0.0	0.0	0.0	0.0	49	123	13	2.5	13	12	8.1	22
23	0.0	0.8	0.0	0.0	0.0	101	128	6.5	3.0	13	11	6.4	23
24	0.0	3.0	0.0	0.0	0.0	55	84	12	5.1	15	12	11	24
25	0.0	0.7	0.0	0.0	0.0	104	55	42	4.8	12	9.7	7.4	25
26	0.0	0.2	0.0	0.0	0.0	55	80	29	2.6	12	8.7	6.0	26
27	0.0	0.1	0.0	0.0	0.0	49	108	37	2.3	10	7.9	5.6	27
28	0.0	0.0	0.0	0.0	0.0	137	96	47	1.8	11	9.4	7.7	28
29	0.0	0.0	0.0	0.0		251	105	22	2.2	13	14	6.6	29
30	0.0	0.0	0.0	0.0*		92	111	53	2.5	14	13	5.3	30
31	0.0		0.0	361		65		39		14	9.4		31
MEAN	0.4	0.8	0.0	11.6	123	37.3	92.3	17.7	6.9	12.1	12.9	11.7	MEAN
MAX.	2.8	6.1	0.0	361	1880 E	251	264	68.0	29.0	27.0	26.0	31.0	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	23.0	4.4	1.0	6.4	7.9	5.3	MIN.
AC.FT.	25	45		716	6833	2291	5492	1086	409	747	793	695	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN DISCHARGE	MAXIMUM DISCHARGE	GAGE HT	MO	DAY	TIME	MINIMUM DISCHARGE	GAGE HT	MO	DAY	TIME	TOTAL ACRE-FEET
26.4	2650 E	12.08	2	1	0730	0.0		10	12	2210	19130

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF DATUM
37 24 59	121 00 45	SW 8 6S 9E	2650E	12.08	2- 1-63	DEC 57-DATE	Dec 57-DATE	1957		0.00	LOCAL

Station located 0.1 mi. below River Road Bridge, 3.7 mi. NE of Crows Landing. This includes drainage returned to San Joaquin River. Daily flows are estimated during periods of backwater from San Joaquin River. Altitude of gage is approximately 50 feet (from USGS topographic map).

TABLE B-30

DAILY MEAN DISCHARGE

SAN JOAQUIN RIVER AT GRAYSON

IN SECOND FEET

STATION NO	WATER YEAR
807080	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	575	385	350	450	1580	2420	3040	3490	4370	1280	530	630	1
2	535	365	335	450	2070	2430	2590	3130	4260	1160	505	605	2
3	535	355	305	450	2750	2240	2310	2680	4210	1060	510	590	3
4	575	340	300	470	3430	1840	2260	2380	4170	1010	520	515	4
5	550	320	305	465	3770	1470	2120	2230	4030	1010	630	585	5
6	560	325	300	450	3890	1280	1940	2110	3690	995	665	585	6
7	525	325	295	445	3620	1160	2100	2000	3190	1010	585	630	7
8	540	335	295	480	2620	1060	2390	1790	2870	1090	575	650	8
9	475	340	275	585	2390	900	2680	1720	2700	990	600	680	9
10	455	340	250	650	2510	960	2870	1960	2510	890	635	710	10
11	485	345	250	660	3190	920	2930	2760	2500	785	685	610	11
12	510	350	275	665	3520	845	3260	3750	2680	775	685	565	12
13	570	365	305	660	3530	775	3360	4180	1970	735	625	635	13
14	560	365	330	635	4140	680	2710	4110	1540	715	630	690	14
15	570	370	310	630	4870	615	2660	3520	1380	710	610	715	15
16	650	365	325	625	4610	665	3300	2870	1360	655	560	890	16
17	540	365	330	600	4320	875	3170	2550	1310	660	520	945	17
18	445	365	365	565	4120	860	2700	2370	1370	655	510	925	18
19	400	360	465	525	3910	785	2810	2800	2420	590	515	960	19
20	375	355	525	505	3720	755	3010	3390	2840	575	505	980	20
21	345	355	525	490	3340	725	3300	3690	3280	600	465	905	21
22	340	355	585	490	3140	715	3360	3570	3370	665	515	1080	22
23	325	335	575	490	3010	825	3360	4040	3030	660	530	1100	23
24	340	320	540	475	2850	900	3400	4150	2550	560	540	1060	24
25	310	325	505	470	2700	915	3440	4190	2190	505	555	1010 *	25
26	320	330	490	460	2620	930	3570	4430	1890	500	565	990 *	26
27	340	335	460	455	2560	920	3670	4260	2000	480	530	755 *	27
28	370	330	450	445	2490	1030	3700	4040	1690	495	510	675 *	28
29	380	315	430	440		1220	3550	4280	1250	530	590	700 *	29
30	380	330	415	460		2030	3510	4580	1280	525	600	685 *	30
31	385		405	575		2680		4520		515	610		31
MEAN	460	346	383	523	3260	1175	2969	3275	2597	754	568	769	MEAN
MAX.	650	385	585	665	4870	2680	3700	4580	4370	1280	685	1100	MAX
MIN.	310	315	250	440	1580	615	1940	1720	1250	480	465	515	MIN
AC.FT.	28294	20559	23544	32162	181031	72248	176668	201402	154512	46383	34929	45729	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1423	4950	34.10	2	15	1300						1017000

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 33 47	121 09 06	NW25 4S 7E	23900	45.15	3- 8-41	JUL 28-DATE	JUL 28-DATE		1959	0.00	USED
								1960		0.00	USCGS
								1960		3.81	USED

Station located at Laird Slough Bridge, 5 mi. above the Tuolumne River. High flows bypassing this station through old channel of San Joaquin River are included in figures shown. Records furn. by City of San Francisco.

TABLE B-31

DAILY MEAN DISCHARGE

BURKHARDT DRAIN NEAR GRAYSON

IN SECOND FEET

STATION NO	WATER YEAR
B00935	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	6.0												1
2	11												2
3	12												3
4	17												4
5	8.7												5
6	8.2												6
7	7.2												7
8	5.3												8
9	4.0												9
10	3.2												10
11	4.7												11
12	4.7												12
13	5.8												13
14	3.4					STATION DISCONTINUED AS OF 10-17-62							14
15	4.1												15
16	3.0												16
17	3.7*												17
18													18
19													19
20													20
21													21
22													22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
MEAN													MEAN
MAX.													MAX.
MIN.													MIN.
AC.FT.													AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT.	MAXIMUM MO.	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT	MINIMUM MO	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE-FEET
											NR

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 30 53	121 12 20	SW 4 4S 7E	105E	2.00	7/4/59	APR 57-SEP 62	APR 57-SEP 62			0.00	LOCAL
								1959		1.00	

Station located 1.2 mi. E.of El Solyo Ranch, 2.6 mi. N. of Grayson. This includes flow of Hospital Creek and drainage returned to San Joaquin River. Record available during irrigation season only. Station discontinued 10-17-62.

TABLE B-32

DAILY MEAN DISCHARGE

TUOLUMNE RIVER AT LAGRANGE BRIDGE

IN SECOND FEET

STATION NO	WATER YEAR
B04175	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	60	587	1040	470	2750	587	1090 *	1830	4650 E	1660 E	23	16	1
2	53	575	812	1200	6850 *	511	1020	1360	4700 E	259	22	12	2
3	13	564	1340	1060	6870	506	876	1330	4380 E	163	22	11	3
4	12	448	1390	669	6900	698	349	1340	2650 E	131	22	20	4
5	11	488	1610	479	6730	674	7.9	1230	1300	136	20	5.2	5
6	11	606	1800	378	5930	536	101	954	1290	540	19	6.8	6
7	10	595	1780	793	2520	544	1390	383	1300	823	20	5.8	7
8	11	607	1270	760	3150	547	3640	346	1890	454	19	8.8	8
9	23	630	1060	591	3420	526	3400	347	2440	1290	17	12	9
10	380	604	1800	791	3190	379	4750	772	3170 E	751	16	2.9	10
11	602	582	1510	814	2230	470	5510	2210	4680 E	1220	20	8.2	11
12	611	635	1400	491	1810	82	3540 *	1510	628 *	924	19	16	12
13	592	695	1130	481	4210	27	1630	844	305	319	18	15	13
14	501	655	1020	480	4580	23	3570	1710	1050	353	18	14	14
15	419	702 *	796	501	2110	18	5760	2590	1290	285 *	19	13	15
16	571	642	522	572	1730	18	2140	2150	703	300	19	13	16
17	562	622	1280	579 *	1690	17	1210	1560 *	297	72	18	11 *	17
18	550	593	1270	589	2940	16	2400	1420	712	36	18	12	18
19	567	721	1230 *	538	2460	12	3240	1450	3340 E	34	30	15	19
20	563	639	1500	438	1970	12	3230	1230	5390 E	31	15	16	20
21	429	644	1640	484	2160	13 *	2770	1120	5070 E	29	14 *	19	21
22	423 *	593	1250	573	1980	16	2700	1130	2200	28	14	18	22
23	601	985	913	466	1380	9.4	2680	1550	2050	28	14	27	23
24	579 *	952	1120	582	991	11	2690	2500	820	25	48	29	24
25	610	699	707	575	1440	11	2750	3070	445	25	9.4	28	25
26	613	1390	1330	550	1700	12	2890	3100	341	24	6.5	28	26
27	613	1370	950	313	1460	276	1710	3490	325	25	7.5	25	27
28	576	1500	968	447	1010	3530	1120	4330	834	23	16	24	28
29	558	1680	844	581		5640	3180	4710	1310	22	12	15	29
30	615	1590	446	512		4930	2720	4690	1170	22	12	12	30
31	617		739	473		4960		4670		22	12		31
MEAN	399	786	1176	588	3077	826	2469	1965	2024	324	18.0	15.3	MEAN
MAX	617	1680	1800	1200	6900	5640	5760	4710	5390 E	1660 E	48.0	29.0	MAX
MIN.	10.0	448	446	313	991	9.4	7.9	346	297	22.0	6.5	2.9	MIN.
AC.FT.	24510	46800	72330	36160	170900	50800	146900	120800	120500	19940	1110	910	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1121	7190	75.28	2	3	1030	0.0		3	15	2030	811700

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 39 59	120 27 40	NW20 3S 14E	48200	188.0	12- 8-50	OCT 36-SEP 60 OCT 61-DATE	OCT 36-SEP 60 OCT 61-DATE	1937		0.00	USGS

Station located at highway bridge, immediately N of La Grange. Flow regulated by reservoirs and power plants. Drainage area is 1,540 sq. mi. Altitude of gage is approximately 175 feet (from USGS topographic map.)

TABLE B-33

DAILY MEAN DISCHARGE

TUOLUMNE RIVER AT ROBERTS FERRY BRIDGE

IN SECOND FEET

STATION NO	WATER YEAR
804165	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	37	659	1630	859	1830	826	1730 *	2070	4140	1260	43	44	1
2	60	649	1330	1290	6880 *	733	1190	1470	4180	842	43	46	2
3	79	647	1500	1530	7150	672	1020	1420	4060	200	37	40	3
4	49	580	1880	1170	7020	696	764	1410	2860	151	37	40	4
5	39	475	2080	939	6990	907	88	1320	1340	144	43	44	5
6	40	642	2410	811	6630 *	819	59	1040	1300	275	41	46	6
7	39	642	2430	889	2620	700	940	416	1290	1060	39	40	7
8	34	643	1880	1220	3500	707	3130	408	1600	305	40	39	8
9	35	670	1600	1010	3760	701	3540	396	2220	1220	43	40	9
10	143	681	2090	1090	3630	560	4350	383	2380	1030	44	37	10
11	586	656	2150	1280	2790	555	5430	1950	4500	1050	47	40	11
12	723	643	1910	966	1950	334	4370	1690	1250 *	1080	46	43	12
13	679	731	1690	806	3350	101	1590	1030	339	572	39	48	13
14	618	793 *	1500	601	5210	72	2660	1230	805	429	40	54	14
15	496	790	1200	620	2580	65	5770	2270	1250	346 *	47	54	15
16	625	747	1040	731	2030	65	3030	2130	953	359	46	49	16
17	627	744	1370	724 *	2060	62	1300	1590 *	318	217	43	44 *	17
18	614 *	705	1800 *	746	2500	60	2420 *	1370	451	79	45	48	18
19	637	740	1720	737	3210	56	2830	1400	2200	51	46	55	19
20	643	756	1980	611	1980	53	3250	1280	4820	45	47	56	20
21	518	744	2160	566	2180	52 *	3110	1140	4810	42	42 *	58	21
22	455	736	1880	733	2100	53	2660	1140	2520	44	48	62	22
23	661	896	1470	605	1690	57	2720	1160	1930	42	50	61	23
24	631	1430	1530	717	1230	54	2700	2370	1190	45	48	58	24
25	651	1180	1270	733	1430	53	2750	2550	501	46	91	68	25
26	678	1540	1440	716	1830	54	2860	2810	452	46	52	73	26
27	671	1860	1590	428	1630	154	2300	3040	359	43	39	76	27
28	650	1950	1360	523	1440	2120	1310	3650	597	43	40	75	28
29	621	2270	1240	721		5150	2430	4210	1290	42	44	76	29
30	674	2240	1050	721		4780	3130	4180	1220	40	47	72	30
31	685		949	631		4970		4170		40	44		31
MEAN	442	948	1649	830	3257	847	2514	1829	1904	361	45.2	52.9	MEAN
MAX.	723	2270	2430	1530	7150	5150	5770	4210	4820	1260	91.0	76.0	MAX
MIN.	34.0	475	949	428	1230	52.0	59.0	383	318	40.0	37.0	37.0	MIN
AC.FT.	27170	56410	101400	51020	180900	52050	149600	112400	113300	22190	2779	3146	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1205	7320	16.04	2	2	2400	29.0	8.24	10	2	0640	872400

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 38 08	120 37 03	NW35 3S 12E	49800	128.2	12- 8-50	JUL 28-OCT 36 JAN 37-FEB 38 JUN 38-DATE	JUL 28-OCT 36 JAN 37-FEB 38 JUN 38-DATE	1930 1940	1940	106.20 0.00	USCGS USCGS

Station located at highway bridge, 7.5 mi. E of Waterford. Flow regulated by reservoirs and power plants. Altitude of gage is approximately 110 feet (from USGS topographic map.)

TABLE B-34

DAILY MEAN DISCHARGE

TUOLUMNE RIVER AT HICKMAN BRIDGE

IN SECOND FEET

STATION NO	WATER YEAR
804150	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	98	618	1580	879	1500	833	2360 *	2270	4270	1210	103	107	1
2	93	619	1230	949	6270 *	722	1360	1610	4300	1140	105	109	2
3	118	612	1230	1480	6840	648	1190	1580	4180	288	102	101	3
4	100	567	1660	1130	6730	603	1030	1510	3230	231	101	94	4
5	93	469	1720	866	6680	908	253	1440	1480	217	106	91	5
6	89	631	1990	717	6550	816	192	1240	1370	233	106	98	6
7	89	640	2120	715	2850	693	883	532	1360	1010	97	96	7
8	87	641	1800	1050	3310	706	3020	494	1530	425	92	86	8
9	86	648	1470	924	3610	708	3840	482	2300	1060	97	89	9
10	88	654	1610	885	3600	611	4410	436	2320	1160	105	84	10
11	419	639	1920	1100	2930	544	5660	1790	4420	949	107	88	11
12	639	619	1650	920	1920	481	5070	1950	1840	1070	108	92	12
13	625	692	1560	743	2740	182	1850	1180	436	659	102	100	13
14	629	769	1430	563	5350	154	2520	1140	742	462	100	103	14
15	497	757 *	1120	574	2670	124	5940	2370	1330	386 *	108	104	15
16	585	745	1020	644	1990	124	3750	2350	1160	385	111	96 *	16
17	594	701	1020	660	2040	121	1460	1760	414	315	110	92	17
18	585	671	1620	675	2140	121	2410 *	1470	417	173	112	92	18
19	599	689	1480 *	697	3450	118	2700	1500	1910	131	113	102	19
20	597	744	1610	584	1930	120	3440	1400 *	4640	117	104	102	20
21	502	718	1780	526 *	2130	118 *	3470	1210	4820 *	109	105 *	102	21
22	433 *	711	1670	677	2120	116	2740	1210	2950	107	110	106	22
23	611	705	1360	575	1710	113	2890	1180	2040	103	111	99	23
24	613	1320	1280	660	1220	107	2830	2380	1450	101	112	94	24
25	619	1120	1250	676	1260	102	2860	2530	593	109	141	94	25
26	639	1210	1100	679	1770	95	2940	2920	557	108	128	101	26
27	631	1620	1490	486	1600	95	2640	3060	429	106	105	103	27
28	611	1680	1170	470	1510	1860	1460	3630	523	101	99	95	28
29	583	1910	1150	687		5340	2190	4280	1320	104	103	94	29
30	638	1930	1040	708		5170	3410	4270	1300	102	106	92	30
31	650		793	626		5020		4270		91	104		31
MEAN	427	868	1449	759	3158	886	2692	1918	1988	412	107	96.9	MEAN
MAX	650	1930	2120	1480	6840	5340	5940	4280	4820	1210	141	109	MAX
MIN.	86.0	469	793	470	1220	95.0	192	436	414	91.0	92.0	84.0	MIN.
AC.FT.	26260	51670	89100	46660	175400	54490	160200	117900	118300	25310	6571	5764	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1212	6970	79.38	2	2	1950	17.0	71.31	3	26	1330	877600

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 38 10	120 45 14	NW34 3S 11E	59000	96.2	12- 8-50	JUL 32-OCT 36 JAN 37-MAR 37 JUL 37-FEB 38 JUL 38-DEC 38 MAR 39-DATE	JUL-32-OCT 36 JAN 37-MAR 37 JUL 37-FEB 38 JUL 38-DEC 38 MAR 39-DATE	1932		0.00	USCGS

Station located at Hickman-Waterford Road Bridge, immediately SE of Waterford. Flow regulated by reservoirs and power plants. Altitude of gage is approximately 80 feet. USC&GS Datum

TABLE B-35

DAILY MEAN DISCHARGE

DRY CREEK NEAR MODESTO

IN SECOND FEET

STATION NO	WATER YEAR
B04130	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	48	23	15	11	465 *	25	68	53	77	131	65	70	1
2	45	24	14	11	1160 *	22	53	46	102	120	59	67	2
3	47	22	14	12	209	23	46	54	125	100	61	65	3
4	58	21	14	12	92	23	41	56	120	115	62	65	4
5	66	20	13	11	58	22	36	46	114	122	64	74	5
6	65	19	13	11	40	21	34 E	50	109	82	70	77	6
7	68	18	13	11	30	18	39 E	50	115	79	67	74	7
8	68	17	13	11	24	18	337 E	43	96	83	69	77	8
9	60	18	12	11	23	21	193	55	79 E	76	68	77	9
10	62	17	12	11	386	19	147	65	86 #	87	70	73	10
11	63	19	12	11	704	20	116	65	86	79	64	67	11
12	68	18	12	10	145	19	102	75	79	74	70	73	12
13	116	17	12	9.6	392	20	92	74	75	74	60	74	13
14	113	16 *	12	9.6	1620 *	20	88	71	76	73	59	72	14
15	102	17	13	9.8	341	19	336	74	83	93 *	58	80	15
16	94	18	21	9.6	141	19	371	77	104	91	63	79 *	16
17	45	16	39 *	9.4*	98	22	182	77	93	82	59	82	17
18	35	16	43	9.3	78	23	113 *	91	95	79	59	94	18
19	30 *	16	27	9.3	66	20	85	80	95	79	55	94	19
20	24	16	20	9.6	55	19	593	71 *	78	75	55	81	20
21	21	16	17	11	48	18 *	372	71	73	79	56	78	21
22	19	15	15	11	43	20	355	72	77	80	62 *	77	22
23	18	14	13	11	38	37	181	93	94	75	55	75	23
24	19	13	13	9.6	35	31	135	81	124	68	53	75	24
25	19	13	12	9.5	32	23	115	73	134	63	58	77	25
26	20	13	12	9.3	29	21	105	101	128	63	63	73	26
27	22	14	12	9.3	28	23	118	94	124	67	72	62	27
28	23	14	12	10	26	34	135	89	123	70	72	60	28
29	23	15	12	12		230 *	103	90	119	73	67	64	29
30	21	15	11	12		155	65	87	120	70	66	67	30
31	18		12	13		94		79		62	64		31
MEAN	48.4	17.0	15.6	10.5	229	35.5	159	71.1	100	82.7	62.7	74.1	MEAN
MAX.	116	24.0	43.0	13.0	1620	230	593	101	134	131	72.0	94.0	MAX
MIN.	18.0	13.0	11.0	9.3	23.0	18.0	34.0	43.0	73.0	62.0	53.0	60.0	MIN.
AC.FT.	2975	1012	962	648	12710	2180	9433	4370	5956	5086	3858	4409	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE FEET
74.0	2130	79.74	2	14	0750	6.8	67.66	2	1	0000	53600

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 39 26	120 55 19	SE24 3S 9E	7710	88.04	12-23-55	MAR 41-DATE	MAR 41-DATE	1941		0.00	USCGS

Station located 0.1 mi. below Claus Road Bridge, 4 mi. E of Modesto. Tributary to Tuolumne River. Prior to Mar. 1941, records available for a site 2.5 mi. downstream. This is a Department of Water Resources-Modesto Irrigation District Cooperative station. Altitude of gage is approximately 80 feet. USC & GS datum.

TABLE B-36

DAILY MEAN DISCHARGE

TUOLUMNE RIVER AT TUOLUMNE CITY

IN SECOND FEET

STATION NO	WATER YEAR
B04105	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	365	885	1870	1040	785	NR	3700	2760	3840	1350	430	405	1
2	345	875	2370	1040	2510	NR	2030	2200	3810	1410	425	400	2
3	355	860	2630	1180	4870	NR	1570	1780	3810	1080	415	385	3
4	360	845	2600	1140	5140	NR	1400	1690	3680	735	415	385	4
5	375	810	2340	1340	5210	NR	1180	1640	2830	715	410	370	5
6	380	725	2230	1040	5230	NR	1130	1550	1970	640	405	385	6
7	380	800	2340	925	4740	NR	720	1330	1740	660	410	395	7
8	385	860	2000	950	2780	NR	1590	990	1630	1040	410	385	8
9	370	870	1770	985	2900	NR	2880	935	1800	755	425	400	9
10	360	875	1550	745	3130	NR	3160	930	2120	1126	425	385	10
11	365	875	1740	1080	3570	NR	3740	1030	2440	1100	425	375	11
12	505	865	1860	1090	2820	NR	4350	2060	3150	1100	425	375	12
13	915	850	1720	1060	2370	NR	3600	2240	1560	1110	405	385	13
14	1080	885	1610	895	4070	NR	2300	1910	960	850	405	415	14
15	1060	930	1500	760	4620	NR	2900	1830	1130	780	405	405	15
16	1010	945	1430	740	3110	NR	4550	2200	1410	720	415	410	16
17	935	950	1250	780	2590	NR	3010	2040	1230	675	390	390	17
18	915	915	1300	790	2430	NR	1970	1710	885	655	390	385	18
19	885	885	1610	795	2770	NR	2380	1610	960	550	390	405	19
20	875	890	1580	795	2680	405	2880	1690	2190	505	385	410	20
21	875	940	1660	730	2190	400	3340	1690	3510	485	385	420	21
22	810	925	1790	690	2180	405	3100	1690	3580	475	390	420	22
23	720	915	1680	775	2070	410	2860	1780	2450	475	400	405	23
24	760	950	1450	720	1750	420	2800	1960	2060	455	405	385	24
25	850	1330	1420	750	1460	410	2760	2510	1510	435	415	395	25
26	860	1250	1320	775	1560	395	2400	2810	1070	435	425	395	26
27	885	1400	1350	775	NR	390	2880	2840	990	435	425	385	27
28	890	1600	1450	660	NR	475	2500	3000	895	435	395	390	28
29	870	1720	1340	630		565	1960	3410	1000	450	400	390	29
30	840	1880	1270	765		3860	2610	3820	1370	445	410	385	30
31	860		1140	825		3810		3860		435	405		31
MEAN	692	1010	1715	880	NR	NR	2608	2048	2053	726	408	394	MEAN
MAX	1080	1880	2630	1340	NR	NR	4550	3860	3840	1410	430	420	MAX
MIN	345	725	1140	630	NR	NR	720	930	885	435	385	370	MIN.
AC.FT.	42526	60109	105461	54079	NR	NR	155207	125207	122142	44648	25111	23445	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day
# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
	5480	36.15	2	14	2350						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 36 12	121 07 50	NW 7 4S 8E				30-DATE	30-DATE		1959	0.00	USED
								1960		0.00	USCGS
								1960		3.50	USED

Station located at highway bridge, 3.35 mi. above mouth. Backwater at times affects the stage-discharge relationship. Records furn. by City of San Francisco.

TABLE B-37

DAILY MEAN DISCHARGE

SAN JOAQUIN RIVER AT HETCH HETCHY AQUEDUCT CROSSING

IN SECOND FEET

STATION NO	WATER YEAR
807060	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	920	1120	1790	1450	1650	3520	7170	6720	10800	2400	725	860	1
2	890	1110	1720	1490	3620	3100	5480	4660	10500	2200	710	865	2
3	880	1090	1510	1430	7180	2860	4050	4610	9780	2060	700	865	3
4	925	1090	1520	1730	10300	2550	3670	4410	9290	1580	720	830	4
5	955	1060	1590	1680	10500	2100	3370	4540	7750	1510	780	850	5
6	955	1010	1670	1480	10500	1990	2680	4310	6040	1400	770	865	6
7	965	1000	1790	1350	9800	1850	2590	4100	5960	1360	755	920	7
8	955	1060	1870	1300	6590	1690	3970	3920	4280	1700	750	960	8
9	815	1080	1800	1530	5620	1620	6010	4070	4280	1600	760	960	9
10	805	1090	1590	1600	5720	1540	7390	4390	4560	1610	810	980	10
11	820	1100	1550	1540	6900	1440	7380	5220	4660	1740	895	865	11
12	910	1100	1780	1860	7890	1300	9170	7740	5020	1570	920	885	12
13	1210	1090	1720	1620	6930	1230	10000	9250	4590	1620	845	890	13
14	1360	1100	1700	1450	8270	980	7590	8610	2430	1430	800	1000	14
15	1360	1130	1590	1920	11100	860	5980	6920	2140	1330	800	1030	15
16	1380	1150	1560	1290	9450	905	8320	5660	2700	1230	890	1170	16
17	1300	1160	1470	1290	8020	1130	8320	4810	3100	1220	770	1340	17
18	1180	1150	1390	1290	7400	1270	6050	4070	2620	1120	780	1320	18
19	1120	1130	1670	1260	7140	1130	5490	4240	3480	1030	765	1360	19
20	1090	1120	1760	1250	7250	990	5940	5600	4120	920	755	1360	20
21	1060	1160	1830	1210	5890	940	7230	6600	6430	920	700	1380	21
22	1040	1150	1900	1150	5250	900	8000	6000	7470	920	725	1450	22
23	975	1140	1830	1190	4970	980	7890	7740	5830	880	890	1510	23
24	950	1110	1790	1190	5460	1070	7880	8230	4670	770	800	1450	24
25	1020	1300	1650	1170	4020	1140	7470	9220	3730	730	835	1430	25
26	1060	1370	1630	1190	3840	1120	7380	9710	2690	725	895	1390	26
27	1080	1350	1500	1190	3900	1080	7810	10100	2020	730	820	1160	27
28	1110	1560	1640	1140	3710	1220	7410	9670	1940	765	745	995	28
29	1120	1620	1530	1050		2110	6120	10400	1770	745	770	990	29
30	1110	1720	1520	1150		5570	6120	10600	2250	715	890	1000	30
31	1100		1460	1280		6750		11000		730	825		31
MEAN	1046	1181	1655	1359	6747	1795	6464	6675	4930	1266	793	1098	MEAN
MAX.	1380	1720	1900	1920	11100	6750	10000	11000	10800	2400	920	1510	MAX
MIN.	805	1000	1390	1050	1650	820	2590	3920	1770	715	700	830	MIN
AC.FT.	64304	70255	101792	83544	374717	110370	384655	410420	293355	77871	48783	65316	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day
# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE FEET
2917	12250	27.94	2	4	1900						2085000

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 38 10	121 12 54	NE32 3S 7E	38400	38.43	4- 2-40	MAR 33-DATE	MAR 33-DATE		1959	0.00	USED
								1960		0.00	USCGS
								1960		3.51	USED

Station located 2.9 mi. above the mouth of the Stanislaus River. Records furn. by City of San Francisco.

TABLE B-38

DAILY MEAN DISCHARGE

STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE

IN SECOND FEET

STATION NO	WATER YEAR
B03175	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	32	172	77	108	3790	29	1680	1060	3580	113	31	38	1
2	28	86	75	104	9270 *	28	1440	1340	2860	59	30	36	2
3	29	161	75	100	4300	28	1430	2710	2180	49	29	33	3
4	31	168	75	100	3080	26	1100	2950	1180	48	33	35	4
5	36	171	75	100	2740	25	134	3150	831	47	29	44	5
6	34	171	76	100	1790 *	179	1240	3640	298	47	32	40	6
7	30	167	79	98	1740	90	4050	5090	858	46	30	43	7
8	29	143	77	97	1900	31	4390	5210	1530	43	31	48	8
9	28	139	80	100	1860	25	3460 *	6290	1560	38	35	43	9
10	28	129	82	102	3780	130	2930	7130 *	1820	37	34	45	10
11	32	127	87	98	3310	571	7740 *	6880	2250 *	33	32	71	11
12	37	142	85	94	2830	502	6440	5730	2020	33	29	76	12
13	145	139	86	87	2740	464	2520	3930	1030	33	28	76	13
14	139	147	84	86	2620	388	2160	2750	982	30	31	73	14
15	122	178 *	100	68	2540	326	2930	1770	2820	30	34	73	15
16	119	172	135	60 *	2510	890	3880	1170	3070	31 *	37	71 *	16
17	83 *	157	128	58	2450	1520	2970	1300	3390	30	34	74	17
18	95	173	296 *	59	2090	492 *	1920	2900	3800	31	31	98	18
19	105	177	483	60	1630	76	1990	5200	1970	32	33 *	94	19
20	96	193	473	51	1390	39	2800	5620	2100	33	31	89	20
21	71	173	444	49	919	36	4380	6080	2140	30	34	88	21
22	73	170	476	43	922	37	4250	6120	1750	30	34	91	22
23	146	174	484	38	923	361	3650	6120	311	29	33	97	23
24	148	175	405	31	921	1000	2780	6070	181	29	33	95	24
25	157	175	125	30	678	411	2760	6030	174	34	36	98	25
26	164	177	107	29	76	60	2750	5370	111	31	38	98	26
27	160	159	108	29	40	36	2350	4500	109	32	35	99	27
28	158	106	455	29	31	3800	1780	4650	384	31	32	98	28
29	152	88	567	30		2730 *	1580	5100	525	30	36	96	29
30	154	78	495	33		1830	1200	4920	399	33	34	94	30
31	158		382	60		1730		4630		28	36		31
MEAN	90.9	153	219	68.7	2245	577	2823	4368	1540	38.1	32.7	71.8	MEAN
MAX	164	193	567	108	9270	3800	7740	7130	3800	113	38.0	99.0	MAX
MIN	28.0	78.0	75.0	29.0	31.0	25.0	134	1060	109	28.0	28.0	33.0	MIN
AC.FT.	5591	9098	13440	4227	124700	35480	168000	268600	91660	2340	2013	4272	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1007	11100	15.69	2	2	0800	22.0	1.3	3	10	1810	729400

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 47 18	120 45 41	SW 4 2S 11E	52000	30.05	11-21-50	JUN 28-DEC 39 APR 40-DATE	JUN 28-DEC 39 APR 40-DATE			0.00	LOCAL

Station located at bridge, 5.0 mi. E of Oakdale. Flow regulated by reservoirs and power plants.
Drainage area, 1,020 sq. mi. Altitude of gage is approximately 70 feet (from U.S.G.S. topographic map).

TABLE B-39

DAILY MEAN DISCHARGE

STANISLAUS RIVER AT RIVERBANK

IN SECOND FEET

STATION NO	WATER YEAR
803145	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	85	167	124	264	972	116	1780	1080	4160	299	86	99	1
2	88	175	121	157	9030 *	107	1540	882	3060	180	84	106	2
3	88	136	121	148	5510	101	1480	2540	2800	143	86	97	3
4	88	174	121	142	3050	97	1430	2750	1520	141	88	95	4
5	87	184	123	141	2950	93	529	3130	1320	128	90	98	5
6	94	186	123	138	2040 *	91	267	3130	605	124	83	104	6
7	91	188	124	135	1610	223	4010	4820	636	119	82	104	7
8	88	183	125	132	1900	115	3790	5180	1590	121	82	110	8
9	87	170	122	132	1780	96	4730	5750	1650	117	84	113	9
10	91	168	126	136	3260	87	2280	7330 *	1850	114	90	108	10
11	93	159	127	134	3320	358	6340 *	7380	2180 *	109 E	89	113	11
12	115	161	128	130	3060	469	7340	6560	2390	104 E	82	136	12
13	161	168	129	125	2680	445	3340	4720	1300 E	100 E	78	147	13
14	194	169	129	122	2760	392	2030	3160	626 E	96 E	77	152	14
15	186	178	132	115	2530	312	2370	2230	2500	92 E	79	142	15
16	161	196	171	103	2480	378	3790	1480	3300	93 #	81	140 *	16
17	143 *	196	191	99	2450	1490	3360	1320	2860	94	82	142	17
18	123	188	173 *	97	2250	771	1860	2230	4260	96	85	148	18
19	129	199	452	96	1700	294 *	1840	4880	2170	100	84 *	165	19
20	132	206	565	94	1580	139	2130	5520	2170	96	82	161	20
21	124	210	472	88	901	112	4090	6140	2210	97	82	163	21
22	109	204	509	86	873	116	4160	6270	2050	89	83	161	22
23	116	202	520	80	854	131	3910	6290	745	88	83	164	23
24	153	201	529	76	847	939	2790	6260	322	85	82	167	24
25	161	204	273	73	816	555	2690	6210	300	82	91	163	25
26	165	202	169	70	318	260	2680	5920	246	88	95	159	26
27	169	209	151	69	167	135	2530	4870	195	83	97	162	27
28	168	189	212	68	130	2000	1730	4610	289	86	95	162	28
29	167	149	604	68		3780 *	1620	5210	544	85	91	166	29
30	164	133	568	71		2000	1190	5100	547	82	93	165	30
31	165		526	78		1790		4950		85	94		31
MEAN	129	182	257	112	2208	580	2788	4449	1680	110	85.8	137	MEAN
MAX	194	210	604	264	9030	3780	7340	7380	4260	299	97.0	167	MAX
MIN	85.0	133	121	68.0	130	87.0	267	882	195	82.0	77.0	95.0	MIN
AC.FT.	7904	10820	15790	6877	122600	35690	165900	273500	99960	6776	5276	8156	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1048	10100	88.73	2	2	1340	67.0	73.0	1	29	1500	759200

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
34 44 31	120 56 21	SW24 2S 9E	85800	103.18	12-23-55	JUL 40-DATE	JUL 40-DATE	1940		0.00	USCGS

Station located at Burneyville Bridge, immediately N of Riverbank. Drainage area 1,055 sq. mi.

TABLE B-40

DAILY MEAN DISCHARGE

STANISLAUS RIVER AT KOETITZ RANCH

IN SECOND FEET

STATION NO	WATER YEAR
B03115	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	263	245	205	665	149	363	2120 E	1760	5170	691 E	209	258	1
2	236	246	195	470	1970	324	1840 E	1570	4380	500 E	210	270	2
3	220	246	187	367	5240	295	1710	1830 E	3560	428 E	242	239	3
4	211	225	183	327	5170 *	272	1680	2540 E	2700	403 E	258	216	4
5	210	243	182	306	3490 *	253	1410	2900 E	1890	436 E	283	234	5
6	220	253	181	299	2860	243	809	3070 E	1490	409 E	241	233	6
7	240	256	181	291	2100	246	1690	3530 E	1050	385 E	215	262	7
8	213	257	181	285	1980	312	3590	4410 E	1360	368 E	222	282	8
9	199	254	180	279	2030	250	4120 *	5050 E	1780	348 E	216	305	9
10	207	244	178	277	2240	226	3820	5740 E	1840	332 E	219	254	10
11	233	239	179	277	3400	218	3340	6410	2000	298 E	219	262	11
12	311	233	180	275	3300	443	5190 *	6750	2300	276 E	233	286	12
13	331	232	179	272	3000 *	526	5840 *	6640	2080 #	279 E	216	340	13
14	358	234	179	269	3030	516	3610	5850 E	1310 E	288 E	202	387	14
15	383	234	181	265	2810	466	2510	4300 E	1430	288 E	208	338	15
16	377	239 *	196	259 *	2630	415	3050	2780 E	2650	257 #	219	305 *	16
17	315	254	238	246	2570	706	3690	2000 E	2840	284	203	294	17
18	254	257	254	239	2490	1280	3070	2300 E	3240	300	204	298	18
19	229	250	239	235	2200	749 *	2310	3720 E	3360	289	219	299	19
20	222	256	400	233	1850	451	2280	4860 #	2240	273	210 *	318	20
21	219	263	509	230	1580	334	3060	5570	2250	281	196	339	21
22	213	265	494	224	1210	280	4130	6010	2300	262	202	336	22
23	205	262	526	218	1140	265	4310	6220	1880	252	239	376	23
24	205	256	538	212	1100	367	3940	6240	969	226	215	324	24
25	227	255	523	208	1080	895	3220	6210	758	213	239	304	25
26	236	258	369	202	931	624	3120	6170	669	199	233	297	26
27	242	262	282 *	199	559	418	3120	6000	568	200	230	304	27
28	246	263	247	197	427	426	2710	5450	489	236	225	312	28
29	248	249	309	194		2420 E	2320	5130	606	233	220	316	29
30	249	222	551	194		2400 E	2080	5320	759	235	233	343	30
31	246		574	198		2250 E		5340		222	226		31
MEAN	251	248	290	271	2233	620	2990	4570 E	1997	313	223	298	MEAN
MAX	383	265	574	665	5240	2420	5840	6750	5170	691	283	387	MAX
MIN	199	222	178	194	149	218	809	1570	489	199	196	216	MIN.
AC.FT.	15410	14780	17850	16690	124000	38150	177900	281000E	118800	19220	13700	17710	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
\# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1192	6800	45.71	5	12	1810	138	27.60	2	1	0000	855,210

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
			OF RECORD					PERIOD			
LATITUDE	LONGITUDE	1/4 SEC T.& R M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	FROM	TO	ZERO ON GAGE	REF DATUM
37 41 57	121 10 08	SW 2 3S 7E					MAR 50-DATE	1950	1951	0.00	USED
								1951		0.00	USCGS
								1951		3.60	USED

Station located 0.6 mi. NW of Bacon and Gates Road Junction, 3.7 mi. SW of Ripon.

TABLE B-41

DAILY MEAN DISCHARGE

SAN JOAQUIN RIVER NEAR VERNALIS

IN SECOND FEET

STATION NO	WATER YEAR
807020	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	1160	1570	2520	2190	1920	4390	8730	8380	13000	3490	1020 E	1140	1
2	1190	1570	2480	2180 *	3830	3950	7720	7540	12500	3130 *	1020 E	1200	2
3	1200	1570	2160	1940	9220	3620	6120 *	6500	11600	2970	1000 E	1210	3
4	1220	1570	1970 *	2270	12100 *	3300	5610	6750	10800	2370	1020 E	1200	4
5	1260	1550	2180	2270	12000	2720 *	5190	6840	9410	2240	1100 E	1200	5
6	1260	1470	2310	2000	11700 *	2620	4120	6930	7810	2130	1120 E	1200	6
7	1330	1400	2480	1720 E	11000	2450	3870	6800 *	6430	2020	1080 E	1190	7
8	1300 *	1420	2620	1670 E	8700	2290	6260	6910	5810	2360	1080 E	1220	8
9	1140	1450	2570	1960	7500 E	2180	8360	7190	6050	2350	1080 E	1270	9
10	1050	1470	2290	2090	7700 F	2060	9860	7720	6370 *	2210	1120 E	1290 *	10
11	1110	1480	2120	2000	9100 E	1930 E	9440	8650	6540	2410	1220 E	1280	11
12	1260	1490	2480	2090	9700 E	1750 E	11200	10800	7780	2180	1280 E	1240	12
13	1650	1500 *	2450	2130	8700 E	1860 E	12500	12200	7000	2210	1150 E	1260	13
14	1940	1510	2430	1910	9700 #	1610 E	10700	11600	4550	2050	1100 E	1340	14
15	2070	1540	2290	1690 E	11900	1460	8350	9790	3540	1900	1050 E	1450 E	15
16	2100	1570	2240	1630 E	11200	1450	9810 *	8150	4760	1760 E	1080 E	1630 E	16
17	1970	1600	2130	1630 E	9970	1790	10600	6910	5510	1640 E	1080 E	1780	17
18	1760	1600	1980	1640 E	9280	2440	8940	6050	4940	1580 E	1100 E	1780	18
19	1630	1590	2360	1590 E	8660 *	2150	7810	6490	6060	1460 E	1100	1800	19
20	1550	1550	2590	1590 E	8650	1780 E	7970	8310	6410	1350 E	1100 *	1800	20
21	1520	1580	2790	1530 E	7550	1570	9100	9490	8080	1320 E	1080	1840	21
22	1480	1590	3010	1470 E	6690	1420	10300	10200	9010	1350 E	1060	1920	22
23	1370	1610	3110	1470 E	6350	1450	10400	10900	8330	1300 E	1060	2060	23
24	1300	1580	2890	1500 E	5950	1560	10400	11200	6350	1200 E	1090	1980	24
25	1320	1720	2670	1470 E	5420	1910 E	9840	11900	5070	1080 E	1120	1920	25
26	1380	1930	2590	1500 E	5100	1930 *	9600	12500	3910	1080 E	1180	1860	26
27	1430	1890	2260	1500 E	4930	1760	9690	12700	3360	1050 E	1150	1770	27
28	1480	2200	2430	1410 E	4670	1790	9550	12300	2910	1080 E	1060	1630	28
29	1520	2310	2260	1300 F		3480	8400	12000	2740	1100 E	1060	1520	29
30	1550	2420	2400	1440 E		7680	8030	12700	3260	1080 E	1080	1470	30
31	1560		2420	1590 E		8480		13100		1020 E	1120		31
MEAN	1454	1643	2435	1754	8185	2607	8616	9339	6663	1822	1095	1515	MEAN
MAX	2100	2420	3110	2270	12100	8480	12500	13100	13000	3490	1280 E	2060	MAX
MIN.	1050	1400	1970	1300 E	1920	1420	3870	6050	2740	1020 E	1000 E	1140	MIN.
AC.FT.	89380	97790	149700	107800	454600	160300	512700	574200	396500	112000	67360	90150	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
\# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
3885	13100	23.80	5	31	1400						2812000

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 40 34	121 15 51		79000	27.75	12-9-50	JUL 22-DEC 23	JUL 22-DEC 23	1931		8.4	USED
						JAN 24-FEB 25	JAN 24-FEB 25				
						JUN 25-OCT 28	JUN 25-OCT 28		1959	5.06	USCGS
						MAY 29-DATE	MAY 29-DATE	1959		0.00	USCGS

Station located on left bank 30 ft. above the Durham Ferry Highway Bridge, 3 mi. below the Stanislaus River 3.4 mi. NE of Vernalis. Drainage area is approx. 14,010 sq. mi. Natural flow of stream affected by storage reservoirs, power development, ground water withdrawals and diversions for irrigation. Low flows consist mainly of return flow from irrigation. This station is operated under the Federal-State Cooperative Program. The records are furnished by the U.S.G.S.

TABLE B-42

DAILY MEAN DISCHARGE

SOUTH FORK KINGS RIVER BELOW EMPIRE WEIR #2

IN SECOND FEET

STATION NO	WATER YEAR
C01120	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53	42	322	1
2	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77	41	334	2
3	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77	41	328	3
4	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60	8	334	4
5	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66	29	351	5
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68	20	370	6
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47	20	429	7
8	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33	35	443	8
9	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35	49	443	9
10	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29	52	443	10
11	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27	52	406	11
12	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25	50	391	12
13	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25	50	381	13
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	50	370	14
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23	50	324	15
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16	50	339	16
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	61	356	17
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	70	374	18
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	16	67	352	19
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60	17	66	339	20
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	103	17	66	338	21
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127	17	66	338	22
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	138	17	67	198	23
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150	17	89	285	24
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147	17	96	280	25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	145	17	95	200	26
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83	30	103	100	27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50	42	105	142	28
29	0.0	0.0	0.0	0.0		0.0	0.0	0.0	47	49	189	99	29
30	0.0	0.0	0.0	0.0		0.0	0.0	0.0	66	51	258	123	30
31	0.0		0.0	0.0		0.0		0.0		48	310		31
MEAN	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.4	34.5	75.7	318	MEAN
MAX.	44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150	77	310	443	MAX
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	8	99	MIN.
AC.FT.	543								2227	2120	4655	18910	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
39.5											28450

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 10	119 50	20S 19E									

Station located 1.0 mi. SW of Stratford. So. Fork Kings River, composed of Kings River water, is a tributary to the Tulare Lake area. Records furn. by Kings River Water Association.

TABLE B-43

DAILY MEAN DISCHARGE

CROSS CREEK BELOW LAKELAND CANAL #2

IN SECOND FEET

STATION NO	WATER YEAR
C02602	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
6	0.0	0.0	0.0	0.0	34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6
7	0.0	0.0	0.0	0.0	164	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7
8	0.0	0.0	0.0	0.0	185	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8
9	0.0	0.0	0.0	0.0	188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9
10	0.0	0.0	0.0	0.0	223	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10
11	0.0	0.0	0.0	0.0	201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11
12	0.0	0.0	0.0	0.0	80	0.0	0.0	0.0	0.0	75	0.0	0.0	12
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75	0.0	0.0	13
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76	0.0	0.0	14
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75	0.0	0.0	15
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69	0.0	0.0	16
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76	0.0	0.0	17
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82	0.0	0.0	18
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76	0.0	0.0	19
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79	0.0	0.0	20
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78	0.0	0.0	21
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63	0.0	0.0	22
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25	0.0	0.0	23
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28
29	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	29
30	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	30
31	0.0		0.0	0.0		0.0		0.0		0.0	0.0		31
MEAN	0.0	0.0	0.0	0.0	38	0.0	0.0	0.0	0.0	27	0.0	0.0	MEAN
MAX.	0.0	0.0	0.0	0.0	223	0.0	0.0	0.0	0.0	82	0.0	0.0	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MIN
AC.FT.					2132					1684			AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
5.4											3816

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 12 42	119 34 05	NE10 20S 22E				21-DATE					

Station located below Cross Creek Weir, 4 mi. E of Guernsey. Tributary to Tulare Lake area. At times the flow is a combination of water from Kaweah River, Kings River, and Cottonwood Creek. Records furn. by Corcoran Irrigation District.

TABLE B-44

DAILY MEAN DISCHARGE

ELK BAYOU NEAR TULARE

IN SECOND FEET

STATION NO	WATER YEAR
C03130	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0*	0.0	0.0	60 *	0.0	0.0*	0.0	0.0	0.0	NR	NR	1
2	0.0	0.0	0.0	0.0	176 *	0.0	0.0	0.0	0.0	0.0	NR	NR	2
3	0.0	0.0	0.0*	0.0	174	0.0	0.0	0.0	0.0	0.0*	NR	NR	3
4	0.0	0.0	0.0	0.0*	210	0.0	0.0	0.0	0.0	0.0	NR	NR	4
5	0.0	0.0	0.0	0.0	243	0.0*	0.0	0.0	0.0*	0.0	NR	NR	5
6	0.0	0.0	0.0	0.0	223	0.0	0.0	0.0*	0.0	0.0	NR	NR	6
7	0.0	0.0	0.0	0.0	215	0.0	0.0	0.0	0.0	0.0	NR	NR	7
8	0.0	0.0	0.0	0.0	223	0.0	0.0	0.0	0.0	0.0	NR	NR	8
9	0.0*	0.0	0.0	0.0	224	0.0	30	0.0	0.0	0.0	NR	NR	9
10	0.0	0.0	0.0	0.0	235	0.0	9.8	0.0	0.0	0.0	NR	NR	10
11	0.0	0.0	0.0	0.0	209	0.0	4.7	0.0	0.0	0.0	NR	NR	11
12	0.0	0.0	0.0	0.0	76	0.0	3.1	0.0	0.0	0.0	NR	NR	12
13	0.0	0.0	0.0	0.0	7.6	0.0	3.0	0.0	0.0	0.0	NR	NR	13
14	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	NR	NR	14
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	15
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	16
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR a	NR	NR	17
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	18
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0*	NR	NR	NR	19
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0*	0.0	NR	NR	NR	20
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	21
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	22
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	23
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	24
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	26
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	27
28	0.0	0.0	0.0*	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	28
29	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	NR	NR	NR	29
30	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	NR	NR	NR a	30
31	0.0		0.0	0.0		0.0		0.0		NR	NR		31
MEAN	0.0	0.0	0.0	0.0	81.4	0.0	1.7	0.0	0.0	NR	NR	NR	MEAN
MAX	0.0	0.0	0.0	0.0	243	0.0	30.0	0.0	0.0	NR	NR	NR	MAX
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NR	NR	NR	MIN.
AC.FT.					4518		100						AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *
a - See Note (a) below.

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
6.4	261	2.35	2	5	2020	0.0		10	1	0000	4619

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 08 37	119 19 48	SW36 20S 24E	261	2.35	2- 5-63	OCT 58-DATE	MAR 57-DATE	1959		0.00	LOCAL

Station located 1.8 mi. W of U.S. Highway 99, 5.8 mi. S of Tulare. Prior to Mar. 4, 1960, station located 700 feet W of U.S. Highway 99, 4.5 mi. S of Tulare. Tributary to Tule River. Prior records, 1942 to July 1953, available at a site 1 mi. E of Elk Bayou Ave. 3.6 mi. below Old Highway 99 Bridge. Recorder installed March 6, 1957. Altitude of gage is approximately 250 ft. (from U.S.G.S. topographic map.)

(a) Work on control to install a gate created a condition, from 7-17-63 to 9-30-63, making it impossible to record low flows if such flow did occur.

TABLE B-45

DAILY MEAN DISCHARGE

FRIANT KERN CANAL DELIVERY TO PORTER SLOUGH

IN SECOND FEET

STATION NO	WATER YEAR
C03913	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG.	SEPT	DAY
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	20	0.0	0.0	20	1
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	20	0.0	0.0	20	2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	20	0.0	0.0	20	3
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	20	0.0	0.0	20	4
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	20	0.0	0.0	20	5
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	20	0.0	0.0	7	6
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	7
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20	0.0	0.0	0.0	8
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	0.0	0.0	0.0	9
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15	0.0	0.0	0.0	10
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6	15	0.0	0.0	0.0	11
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	15	0.0	0.0	0.0	12
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	15	0.0	0.0	0.0	13
14	0.0	17	0.0	0.0	0.0	0.0	0.0	10	15	0.0	0.0	0.0	14
15	0.0	25	0.0	0.0	0.0	0.0	0.0	10	15	0.0	0.0	0.0	15
16	0.0	25	0.0	0.0	0.0	0.0	7	10	15	0.0	0.0	0.0	16
17	0.0	24	0.0	0.0	0.0	0.0	10	10	15	0.0	0.0	0.0	17
18	0.0	18	0.0	0.0	0.0	0.0	11	15	12	0.0	0.0	0.0	18
19	0.0	11	0.0	0.0	0.0	0.0	12	20	10	0.0	0.0	0.0	19
20	0.0	5	0.0	0.0	0.0	0.0	14	20	5	0.0	0.0	0.0	20
21	0.0	0.0	0.0	0.0	13	0.0	15	20	0.0	0.0	6	0.0	21
22	0.0	0.0	0.0	0.0	20	0.0	15	20	0.0	0.0	9	0.0	22
23	0.0	0.0	0.0	0.0	23	0.0	15	20	0.0	0.0	8	0.0	23
24	0.0	0.0	0.0	0.0	25	0.0	15	20	0.0	0.0	11	0.0	24
25	0.0	0.0	0.0	0.0	25	0.0	21	20	0.0	0.0	16	0.0	25
26	0.0	0.0	0.0	0.0	25	0.0	22	20	0.0	0.0	18	0.0	26
27	0.0	0.0	0.0	0.0	25	0.0	22	20	0.0	0.0	18	0.0	27
28	0.0	0.0	0.0	0.0	25	0.0	21	20	0.0	0.0	19	0.0	28
29	0.0	0.0	0.0	0.0	0.0	0.0	22	23	0.0	0.0	20	0.0	29
30	0.0	0.0	0.0	0.0		0.0	22	25	0.0	0.0	20	0.0	30
31	0.0		0.0	0.0		0.0		22	0.0	0.0	20		31
MEAN	0.0	4.2	0.0	0.0	6.5	0.0	8.1	13.2	10.8	0.0	5.3	3.6	MEAN
MAX	0.0	25	0.0	0.0	25	0.0	22	25	20	0.0	20	20	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MIN
AC.FT.		248			359		484	809	643		327	212	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
\# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
4.3											3082

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
36 05 00	119 04 50	SW20 21S 27E									

These flows are deliveries from Friant-Kern Canal into Porter Slough under contract agreement with the U.S.B.R. Delivery is at the intersection of Porter Slough with the Friant-Kern Canal approx. 4 mi. W of Porterville. Records furn. by U.S.B.R.

TABLE B-46

DAILY MEAN DISCHARGE

FRIANT KERN CANAL DELIVERY TO TULE RIVER

IN SECOND FEET

STATION NO	WATER YEAR
C03923	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR.	APR	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	251	276	0.0	0.0	140	1
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	260	276	0.0	0.0	140	2
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	265	276	0.0	0.0	140	3
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	267	276	0.0	0.0	140	4
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	273	276	0.0	0.0	140	5
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	276	276	0.0	0.0	157	6
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	276	276	0.0	0.0	183	7
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	276	276	0.0	10	190	8
9	0.0	0.0	0.0	0.0	0.0	0.0	67	276	276	0.0	15	177	9
10	0.0	0.0	0.0	0.0	0.0	0.0	200	276	276	0.0	26	170	10
11	0.0	0.0	0.0	0.0	0.0	0.0	249	276	276	0.0	32	170	11
12	0.0	0.0	0.0	0.0	0.0	0.0	317	276	276	0.0	32	158	12
13	0.0	0.0	0.0	0.0	0.0	0.0	351	276	276	0.0	32	151	13
14	0.0	0.0	0.0	0.0	0.0	0.0	351	276	276	0.0	32	151	14
15	0.0	0.0	0.0	0.0	0.0	0.0	310	276	276	0.0	32	151	15
16	0.0	0.0	0.0	0.0	0.0	0.0	178	276	276	0.0	32	151	16
17	0.0	0.0	0.0	0.0	0.0	0.0	201	276	276	0.0	32	151	17
18	0.0	0.0	0.0	0.0	0.0	0.0	201	276	276	0.0	37	151	18
19	0.0	0.0	0.0	0.0	0.0	0.0	201	276	253	0.0	40	151	19
20	0.0	0.0	0.0	0.0	0.0	0.0	216	276	206	0.0	40	151	20
21	0.0	0.0	0.0	0.0	12	0.0	225	276	112	0.0	23	151	21
22	0.0	0.0	0.0	0.0	20	0.0	225	276	60	0.0	14	151	22
23	0.0	0.0	0.0	0.0	20	0.0	225	276	55	0.0	14	151	23
24	0.0	0.0	0.0	0.0	20	0.0	225	276	17	0.0	14	151	24
25	0.0	0.0	0.0	0.0	20	0.0	242	276	0.0	0.0	14	151	25
26	0.0	0.0	0.0	0.0	20	0.0	251	276	0.0	0.0	14	151	26
27	0.0	0.0	0.0	0.0	20	0.0	251	276	0.0	0.0	14	175	27
28	0.0	0.0	0.0	0.0	23	0.0	241	276	0.0	0.0	95	185	28
29	0.0	0.0	0.0	0.0		0.0	251	276	0.0	0.0	140	185	29
30	0.0	0.0	0.0	0.0		0.0	251	276	0.0	0.0	140	185	30
31	0.0		0.0	0.0		0.0		276		0.0	140		31
MEAN	0.0	0.0	0.0	0.0	5.5	0.0	174	274	189	0.0	32	158	MEAN
MAX.	0.0	0.0	0.0	0.0	23	0.0	351	276	276	0.0	140	190	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	251	0.0	0.0	0.0	140	MIN.
AC.FT.					307		10372	16844	11248		2011	9420	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
\# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
69.4											50202

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 04 25	119 05 15	NW29 21S 27E									

These flows are deliveries from Friant-Kern Canal into Tule River under contract agreements with the U.S.B.R. Delivery is located on the Tule River approximately 4 mi. W of Porterville. Record furnished by U.S.B.R.

TABLE B-47

DAILY MEAN DISCHARGE

NORTH FORK TULE RIVER AT SPRINGVILLE

IN SECOND FEET

STATION NO	WATER YEAR
C32100	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	0.6	0.5*	0.3	1.4	2000 *	25	88 *	187 *	47	9.9	0.8	0.4	1
2	0.3	0.3	0.3	1.3	396	24	80	179	44	8.0	1.0	0.3	2
3	0.4	0.3	0.3*	1.1	153	24	73	185	41	7.3*	0.6	0.3	3
4	0.9	0.3	0.9	0.7	92	22	74	173	40	7.7	0.5	0.4*	4
5	0.7	0.3	0.9	0.6	72 *	18	76	151	36 *	7.9	0.7*	0.6	5
6	0.3	0.2	0.6	0.5	60	18 *	76	143	37	7.2	0.8	0.7	6
7	0.3	0.2	0.9	0.5	50	17	287	135	37	6.1	0.7	0.6	7
8	0.4	0.3	0.9	0.5	43	17	305	123	34	5.6	1.0	0.5	8
9	0.9	0.6	0.9	0.5	42	20	203	170	31	5.2	1.0	0.5	9
10	0.3	0.6	0.6	0.5	183	22	157	133	30	4.1	1.0	0.7	10
11	0.3	0.5	0.4	0.5	104	20	123	130	32	2.7	0.6	0.5	11
12	0.3	0.5	0.5	0.5	83	20	110	113	40	2.3	0.5	0.5	12
13	0.3	0.5	1.0	0.5	73	18	100	106	40	2.3	0.8	0.5	13
14	0.6	0.5	1.0	0.5	75	17	148	100	33	1.6	0.8	0.6	14
15	0.4	0.4	0.8	0.5	72	25	321	95	30	1.0	0.6	0.6	15
16	0.4	0.4	1.3	0.5	60	27	214	91 *	28	1.2	0.7	0.6	16
17	0.4	0.4	1.1	0.5	54	43	175	89	23	0.8	0.4	0.8	17
18	0.2	0.4	0.7	0.5	48	36	145	88	21	0.8	0.4	1.0	18
19	0.5	0.6	0.5	0.5	45	31	131	86	19	1.1	0.4	0.9	19
20	0.3	0.3	0.5*	0.8	42	37	137	83	18	1.0	0.4	0.9	20
21	0.3	0.3	0.9	1.0	41	46	169	80	18	0.9	0.6	1.0	21
22	0.3	0.3	0.9	1.0	38	49	139	80	18	0.8	0.5	1.1	22
23	0.3	0.3	0.8	1.1	35	56	136	78	16	0.8	0.4	1.0	23
24	0.3	0.3	0.9	0.9*	34	51	136	74	15	0.8	0.3	1.0	24
25	0.4	0.3	1.0	0.7	32	48	136	68	13	0.9	0.4	0.8	25
26	0.4	0.3	1.1	0.6	30	47	176	66	12	0.9	0.4	0.7	26
27	0.2	0.3	1.2	0.6	29	48	146	62	11	0.9	0.4	0.7	27
28	0.5	0.3	1.6	0.6	27	167	129	61	11	0.6	0.4	0.7	28
29	0.4	0.3	1.5	0.7		116	141	63	11	0.8	0.4	0.8	29
30	0.5	0.3	1.5	127		89	165	56	12	0.7	0.5	1.0	30
31	0.6		1.4	1770		82		49		0.8	0.5		31
MEAN	0.4	0.4	0.9	61.8	143	41.3	150	106	26.6	3.0	0.6	0.7	MEAN
MAX.	0.9	0.6	1.6	1770	2000	167	321	187	47.0	9.9	1.0	1.1	MAX
MIN.	0.2	0.2	0.3	0.5	27.0	17.0	73.0	49.0	11.0	0.6	0.3	0.3	MIN.
AC.FT.	26	22	54	3803	7960	2539	8918	6540	1583	184	37	41	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
43.8	4600 E	10.29	1	31	1550	0.2	3.93	10	2	1550	31700

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
36 08 23	118 48 16	SE35 20S 29E	4600E	10.29	1-31-63	FEB 57-DATE	FEB 57-DATE	1957		0.00	LOCAL

Station located at State Highway 190 Bridge, 0.8 mi. NE of Springville. Drainage area is 97.9 sq. mi. Altitude of gage is approx. 990 ft. (from U.S.G.S. topographic map.)

TABLE B-48

DAILY MEAN DISCHARGE

TULE RIVER BELOW PORTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
C03169	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	0.0	0.0	0.0	0.0	330 E	0.0	120	237	256	0.0	0.0	135	1
2	0.0	0.0	0.0	0.0	132 *	0.0	113 *	244	258	22	0.0	134	2
3	0.0	0.0	0.0*	0.0	233	0.0	112	256	258	26	0.3	125	3
4	0.0	0.0	0.0	0.0	211	0.0	113	254	258	4.9	0.0	125 *	4
5	0.0	0.0	0.0	0.0	185	0.0*	113	257	259 *	5.0	0.0*	126	5
6	0.0	0.0	0.0	0.0	193	0.0	110	256	261	0.0	0.0	138	6
7	0.0	0.0	0.0	0.0	201	0.0	125	256	261	0.0	0.8	163	7
8	0.0	0.0	0.0	0.0	205	0.0	114	256	258	0.0*	127	170	8
9	0.0*	0.0	0.0	0.0	216	0.0	118	256	256	0.0	192	160	9
10	0.0	0.0	0.0	0.0	195	0.0	214	263	258	0.0	212	152	10
11	0.0	0.0	0.0	0.0	188	0.0	239	270	261	0.0	191	150	11
12	0.0	0.0	0.0	0.0	183	0.0	290	265	258	0.0	192	137	12
13	0.0	0.0	0.0	0.0	200	0.0	325	263	256	0.0	192 *	133	13
14	0.0	0.0	0.0	0.0	192 *	0.0	329	256	258	0.0	187	135	14
15	0.0	0.0	0.0	0.0	200	0.0	302	258	261	0.0	197	133	15
16	0.0	0.0	0.0	0.0	227	0.0	169	256	263	0.0	200	132	16
17	0.0	0.0	0.0	0.0	215	0.0	195 *	252	263	0.0*	193	129	17
18	0.0	0.0	0.0	0.0	135	0.0*	198	258	261	0.0	194	132	18
19	0.0	0.0	0.0	0.0	0.7	0.0	196	258	239	1.1	202	133	19
20	0.0	0.0	0.0	0.0	0.1	0.0	206	258	200	0.0	189 *	136	20
21	0.0	0.0	0.0	0.0	4.2	0.0	216	258	105	0.0	133	132	21
22	0.0	0.0	0.0	0.0*	0.0	0.0	214	256	53	0.0	125	132	22
23	0.0	0.0	0.0	0.0	0.0	65	214	256	47	0.0	124	132	23
24	0.0	0.0	0.0	0.0	0.0	116 *	211	254	14	0.0	119	137	24
25	0.0	0.0	0.0	0.0	0.0	94	224	252	0.0	0.0	122	136	25
26	0.0	0.0	0.0	0.0	0.0	87	234	254	0.0	0.0	123	133	26
27	0.0	0.0	0.0	0.0	0.0	78	233	254	0.0	0.0	121	157	27
28	0.0	0.0	0.0*	0.0	0.0	107 *	230	256	0.0	0.0	110	164	28
29	0.0*	0.0	0.0	0.0		94 *	232	254	0.0	0.0	138	166	29
30	0.0	0.0	0.0	0.0		114	234	254	0.0	0.0	137	170	30
31	0.0		0.0	384 E		122		256		0.0	135		31
MEAN	0.0	0.0	0.0	12.4	130	28.3	198	256	177	1.9	124	141	MEAN
MAX	0.0	0.0	0.0	384 E	330 E	122	329	270	263	26.0	212	170	MAX
MIN	0.0	0.0	0.0	0.0	0.0	0.0	110	237	0.0	0.0	0.0	125	MIN.
AC.FT.				762	7232	1740	11790	15740	10560	117	7648	8404	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day
# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
88.4	2180 E	4.56	1	31	2110	0.0		10	1	0000	63980

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF DATUM
36 04 40	119 06 22	NW30 21S 27E	5170	8.17	5-19-57	FEB 57-DATE	FEB 57-DATE	1957 1959	1959	0.00 -3.48	LOCAL LOCAL

Station located 330 ft. above Rockford Road Bridge, 5.1 mi. W of Porterville. Flows regulated by Success Reservoir and spill from Friant-Kern Canal. Altitude of gage is approx. 400 ft. (from U.S.G.S. topographic map). Flows include C.V.P. releases from Friant-Kern Canal to Tule River.

TABLE B-49

DAILY MEAN DISCHARGE

STATION NO	WATER YEAR
C03970	1963

CAMPBELL-MORELAND DITCH ABOVE PORTERVILLE

IN SECOND FEET

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	12	0.0	0.0	10	0.0	0.0	0.0	0.0*	26	22 *	18 *	13	1
2	3.5	0.0	0.0	10	0.0	0.0	0.0*	0.0	30	23	20	12 *	2
3	1.5	0.0	0.0*	12	0.0	0.0	0.0	0.0	32 *	23	20	12	3
4	1.3	0.0	0.0	14	0.0	0.0	0.0	0.0	33	20	21	12	4
5	3.1	0.0	5.9	14	20	0.0	0.0	0.0	33	18	21	14	5
6	5.4	0.0	15	14	31	0.0*	0.0	0.0	33	17	21	14	6
7	7.8	0.0	16	13	32	0.0	0.0	0.0	33	17	24	14	7
8	7.8	0.0	16	12	32	0.0	0.0	0.0	34	16	25	14	8
9	9.3	0.0	18	11	27	0.0	0.0	0.0	34	17	25	13	9
10	9.6	3.5	19	11	23	0.0	0.0	0.0	34	17	24	13	10
11	11	10	19	12	23	0.0	0.0	0.0	33	17	24	13	11
12	7.5	11	18	11	24	0.0	0.0	0.0	32	16	25	13	12
13	5.6	12	16	11	24	0.0	0.0	15	32	16	25	11	13
14	7.2	12	15	11	24	0.0	0.0	26	31	16	25	12	14
15	15	13	14	10	20	0.0	0.0	26	31	16	25	15	15
16	19	14	14	11	17	0.0	0.0	26	31	16	25	14 *	16
17	14	15	14	10 *	17	0.0	0.0*	25	31	16	27	14	17
18	12	15	14	11	18	0.0	0.0	24	32	16	34	15	18
19	12	15	11	12	21	0.0*	0.0	22	32	16	30	15	19
20	11	17	10 *	12	22	0.0	0.0	22 *	27	16	24	15	20
21	10	18	12	12	18	0.0	0.0	21	22	16	24	16	21
22	8.4	18	12	12	8.6	0.0	0.0	20 *	22	16	19	13	22
23	5.4*	20	12	12	0.0	0.0	0.0	20	22	16	15	11	23
24	5.1	20	13	12	0.0	0.0	0.0	20	22	16	15	16	24
25	4.4	20	13	12	0.0	0.0	0.0	19	22	16	16	17	25
26	3.9	19	12	13	0.0	0.0	0.0	20	21	16	16	18	26
27	1.4	9.0	10	13	0.0	0.0	0.0	19	21	16	15	17	27
28	0.0	0.0	10	13	0.0	0.0	0.0	18	21	16	15	17	28
29	0.0	0.0	11	14		0.0	0.0	18	21	16	14	18	29
30	0.0	0.0	10	12		0.0	0.0	17	21	15	13	19 *	30
31	0.0		10	5.7		0.0		14		16	13		31
MEAN	6.9	8.7	11.6	11.7	14.3	0.0	0.0	12.6	28.3	17.0	21.2	14.3	MEAN
MAX	19.0	20.0	19.0	14.0	32.0	0.0	0.0	26.0	34.0	23.0	34.0	19.0	MAX
MIN.	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	21.0	15.0	13.0	11.0	MIN
AC.FT.	425	519	714	719	797			778	1684	1043	1305	853	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT	MAXIMUM MO	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT	MINIMUM MO	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE-FEET
12.2	38.0	3.34	8	18	1130	0.0		10	27	2400	8836

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 02 48	118 56 54	NW 4 22S 28E				AUG 42-DATE			Oct 62	0.00	LOCAL
								Oct 62		-2.00	LOCAL

Station located 3.9 mi. SE of Porterville approximately 2600 ft. below head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association.

TABLE B-50

DAILY MEAN DISCHARGE

PORTER SLOUGH AT PORTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
C03182	1963

DAY	OCT.	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0*	0.0	0.0	142 *	0.0	0.0*	35	0.0	43	40 *	39	1
2	0.0	0.0	0.0	0.0	132 *	0.0	0.0	36 *	0.0	42	27	38	2
3	0.0	0.0	0.0*	0.0*	141	0.0	0.0	36	0.0	41 *	23	39	3
4	0.0	0.0	0.0	0.0	137	0.0	0.0	33	0.0	43	25	37 *	4
5	0.0	0.0	0.0	0.0	144	0.0	0.0	33	0.0*	43	24	30	5
6	0.0	0.0	0.0	0.0	143	0.0*	0.0	34	0.0	42	24	29	6
7	0.0	0.0	0.0	0.0	143	0.0	0.0	34	0.0	42	23	28	7
8	0.0	0.0	0.0	0.0	144	0.0	0.0	35	3.9	48	20	28	8
9	0.0*	0.0	0.0	0.0	143	0.0	0.0	37	34	54	16	28	9
10	0.0	0.0	0.0	0.0	139	0.0	0.0	34	38	57	1.8	27	10
11	0.0	0.0	0.0	0.0	136	0.0	0.0	31	40	54	0.3	27	11
12	0.0	0.0	0.0	0.0	137	0.0	0.0	30	39	53	0.0	27	12
13	0.0	0.0	0.0	0.0	142	0.0	0.0	31	31	53	0.0	17	13
14	0.0	0.0	0.0	0.0	144	0.0	0.0	32	35	54	0.0	1.6	14
15	0.0	0.0	0.0	0.0	145	0.0	0.0	21	48	54	0.0	0.3	15
16	0.0	0.0	0.0	0.0	145	0.0	0.0	1.2	46	54	3.2	0.0	16
17	0.0	0.0	0.0	0.0*	145	0.0	0.0*	0.2	47	54	31	0.0	17
18	0.0	0.0	0.0	0.0	94	0.0*	0.0	0.0	49	54	34	0.0*	18
19	0.0	0.0*	0.0	0.0	23	0.0	0.0	10	50	49	34	0.0	19
20	0.0	0.0	0.0	0.0	20	0.0	0.0	25	48	48	41	0.0	20
21	0.0	0.0	0.0	0.0	13	0.0	0.0	0.9	50	47	38	0.0	21
22	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	48	47	39	0.0	22
23	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	45	47	38	0.0	23
24	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	46	47	38	0.0	24
25	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	45	47	38	0.0	25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47	46	37	0.0	26
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45	46	37	0.0	27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	47	39	3.6	28
29	0.0	0.0	0.0	0.0		0.0	8.6	0.0	42	47	38	30	29
30	0.0	0.0	0.0	4.3		0.0	38	0.0	42	47	38	36	30
31	0.0		0.0	124 E		0.0		0.0		46	38		31
MEAN	0.0	0.0	0.0	4.1	91.2	0.0	1.6	17.1	32.1	48.3	25.3	15.5	MEAN
MAX	0.0	0.0	0.0	124 E	145	0.0	38.0	37.0	50.0	57.0	41.0	39.0	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0	0.0	0.0	MIN.
AC.FT.				254	5064		92	1050	1910	2967	1558	923	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day
# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
19.1	224 E	3.70	1	31	1900	0.0		10	1	0000	13820

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 03 29	118 59 08	SE31 21S 28E				JAN 42-DATE	JAN 42-DATE	1957		0.00	LOCAL

Station located at "B" Lane Bridge, immediately E of Porterville. This is regulated diversion from Tule River. Altitude of gage is approx 465 ft. (from U.S.G.S. topographic map).

TABLE B-51

DAILY MEAN DISCHARGE

PORTER SLOUGH DITCH AT PORTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
C03984	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR.	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	0.0	0.0	0.0	0.0	14	0.0	0.0	10	0.0	22 *	14 *	9.6	1
2	0.0	0.0	0.0	0.0	13	0.0	0.0*	13 *	0.0	21	14	9.4*	2
3	0.0	0.0	0.0*	0.0*	13	0.0	0.0	10	0.0*	19	13	8.2	3
4	0.0	0.0	0.0	0.0	13	0.0	0.0	11	0.0	17	12	6.2	4
5	0.0	0.0	0.0	0.0	14	0.0	0.0	12	0.0	17	13	5.3	5
6	0.0	0.0	0.0	0.0	14	0.0*	0.0	13	0.0	17	14	6.1	6
7	0.0	0.0	0.0	0.0	14	0.0	0.0	13	0.0	17	14	5.9	7
8	0.0	0.0	0.0	0.0	15	0.0	0.0	14	0.0	16	12	6.0	8
9	0.0	0.0	0.0	0.0	15	0.0	0.0	14	0.4	15	9.9	8.9	9
10	0.0	0.0	0.0	0.0	14	0.0	0.0	14	12	16	0.0	10	10
11	0.0	0.0	0.0	0.0	14 *	0.0	0.0	14	19	16	0.0	10	11
12	0.0	0.0	0.0	0.0	15	0.0	0.0	14	19	15	0.0	10	12
13	0.0	0.0	0.0	0.0	15 *	0.0	0.0	12 *	15	15	0.0	2.5	13
14	0.0	0.0	0.0	0.0	16	0.0	0.0	5.8	14	15	0.0	0.0	14
15	0.0	0.0	0.0	0.0	16 *	0.0	0.0	0.0	15	14 *	0.0*	0.0	15
16	0.0	0.0	0.0	0.0	16	0.0	0.0	0.0	14	14	0.0	0.0*	16
17	0.0	0.0	0.0	0.0*	16	0.0	0.0*	0.0	16	14	0.0	0.0	17
18	0.0	0.0	0.0	0.0	11	0.0*	0.0	0.0	15	13 *	0.0	0.0	18
19	0.0	0.0*	0.0	0.0	0.0	0.0	0.0	0.0	14	12	7.1	0.0	19
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	9.8	12	0.0	20
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	7.8	12	0.0	21
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	8.0	14	0.0	22
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12 *	8.0*	13	0.0	23
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13	9.9	12	0.0	24
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17	12	12	0.0	25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	13	12	0.0	26
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19	13	13	0.0	27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20	13	10	0.0	28
29	0.0*	0.0	0.0	0.0		0.0	0.0	0.0	21	13	9.4	0.0	29
30	0.0	0.0	0.0	0.0		0.0	2.4	0.0	21	13	9.5	5.5*	30
31	0.0		0.0	5.6		0.0		0.0		13	9.5		31
MEAN	0.0	0.0	0.0	0.2	9.2	0.0	0.1	5.5	11.2	14.1	8.4	3.5	MEAN
MAX	0.0	0.0	0.0	5.6	16.0	0.0	2.4	14.0	21.0	22.0	14.0	10.0	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0	MIN.
AC.FT.				11	512		5	337	669	870	518	205	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day.
# - E and *

WATER YEAR SUMMARY

MEAN DISCHARGE	MAXIMUM DISCHARGE	MAXIMUM GAGE HT	MAXIMUM MO	MAXIMUM DAY	MAXIMUM TIME	MINIMUM DISCHARGE	MINIMUM GAGE HT	MINIMUM MO	MINIMUM DAY	MINIMUM TIME	TOTAL ACRE-FEET
4.3	NR					NR					3127

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 04 06	119 01 06	SE26 21S 27E				JAN 43-DATE		1943		0.00	LOCAL

Station located in Porterville 0.5 mi. W of Porterville Post Office, approximately 150 ft. below head. This is regulated diversion from Tule River via Porter Slough. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association.

TABLE B-52

DAILY MEAN DISCHARGE

PORTER SLOUGH NEAR PORTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
C03187	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	0.0	0.0*	0.0	0.0	73	0.0	0.0*	0.0	0.0	2.5	7.4	10	1
2	0.0	0.0	0.0	0.0	76 *	0.0	0.0	0.0*	0.0	1.8	0.0	10	2
3	0.0	0.0	0.0*	0.0*	98	0.0	0.0	0.0	0.0	4.0*	0.0	11	3
4	0.0	0.0	0.0	0.0	93	0.0	0.0	0.0	0.0	5.9	0.0	13 *	4
5	0.0	0.0	0.0	0.0	95 *	0.0	0.0	0.0	0.0*	6.3	0.0*	8.8	5
6	0.0	0.0	0.0	0.0	101	0.0*	0.0	0.0	0.0	6.0	0.0	7.0	6
7	0.0	0.0	0.0	0.0	111	0.0	0.2	0.0	0.0	5.6	0.0	6.4	7
8	0.0*	0.0	0.0	0.0	108	0.0	0.0	0.0	0.0	9.1	0.0	6.3	8
9	0.0	0.0	0.0	0.0	111	0.0	0.0	0.5	0.0	17	0.0	4.4	9
10	0.0	0.0	0.0	0.0	111	0.0	0.0	1.1	0.0	20	0.0	3.5	10
11	0.0	0.0	0.0	0.0	91 *	0.0	0.0	0.0	0.0	19	0.0	2.8	11
12	0.0	0.0	0.0	0.0	93	0.0	0.0	0.0	0.8	19	0.0	2.7	12
13	0.0	0.0	0.0	0.0	97 *	0.0	0.0	0.5*	0.1	19	0.0	4.9	13
14	0.0	0.0	0.0	0.0	94	0.0	0.1	8.4	1.0	20	0.0	0.0	14
15	0.0	0.0	0.0	0.0	96	0.0	0.0	12	11	20	0.0	0.0	15
16	0.0	0.0	0.0	0.0	102	0.0	0.0	0.0	12 E	19	0.0	0.0	16
17	0.0	0.0	0.0	0.0	99	0.0	0.0*	0.0	12 E	19	0.2	0.0	17
18	0.0	0.0	0.0	0.0	61	0.0*	0.0	0.0	12 E	21	10	0.0*	18
19	0.0	0.0	0.0	0.0	18	0.0	0.0	0.0	11 *	18	5.4	0.0	19
20	0.0	0.0	0.0	0.0	16	0.0	0.0	11	11	17	7.3	0.0	20
21	0.0	0.0	0.0	0.0	11	0.0	0.0	0.0	13	19	6.1	0.0	21
22	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	15	18	5.9	0.0	22
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	20	6.4	0.0	23
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	18	7.4	0.0	24
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	15	7.1	0.0	25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13	6.9	0.0	26
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	12	7.1	0.0	27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	11	9.2	0.0	28
29	0.0	0.0	0.0	0.0		0.0	0.0	0.0	3.0	12	9.7	0.0	29
30	0.0	0.0	0.0	0.0		0.0	0.0	0.0	2.3	11	9.9	0.0	30
31	0.0		0.0	28 E		0.0		0.0		11	10		31
MEAN	0.0	0.0	0.0	0.9	62.8	0.0	0.0	1.1	5.3	13.8	3.7	3.0	MEAN
MAX	0.0	0.0	0.0	28.0E	111	0.0	0.2	12.0	15.0	21.0	10.0	13.0	MAX
MIN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	MIN.
AC.FT.				56	3486		1	66	313	851	230	180	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day.
\# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
7.2	153 E	3.67	2	9	1900	0.0		10	1	0000	5183

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 04 00	119 03 08	NE28 21S 27E	364	5.14	4- 3-58	JAN 57-DATE	JAN 57-DATE	1957		0.00	LOCAL

Station located at Newcomb Drive Bridge, 2.0 mi. W of Porterville. Tributary to Tulare Lake Basin via Tule River. Altitude of gage is approx. 425 ft. (from U.S.G.S. topographic map).

TABLE B-53

DAILY MEAN DISCHARGE

VANDALIA DITCH NEAR PORTERVILLE

STATION NO	WATER YEAR
C03965	1963

IN SECOND FEET

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0*	3.8	0.0*	5.0*	0.0	1
2	0.0	0.0	0.0	0.0	0.2	0.0	0.0*	0.0	4.0	3.4	5.0	0.0*	2
3	0.0	0.0	0.0*	0.0*	0.2	0.0	0.0	0.0	4.1*	5.8	5.0	0.0	3
4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	4.1	5.8	4.9	2.3	4
5	0.0	0.0	0.0	0.0	2.3E	0.0	0.0	0.0	4.1	6.0	5.2	4.3	5
6	0.0	0.0	0.0	0.0	6.5E	0.0*	0.0	0.0	4.1	6.1	5.4	4.3	6
7	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0	4.2	6.1	2.0	4.3	7
8	0.0	0.0	0.0	0.0	6.9	0.0	0.0	0.0	4.1	6.2	0.2	4.3	8
9	0.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0	3.9	6.4	0.1	4.3	9
10	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	3.9	6.8	0.1	4.5	10
11	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	3.8	7.1	0.1	4.6	11
12	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	3.4	7.2	0.0	4.6	12
13	0.0	0.0	0.0	0.0	6.7*	0.0	0.0	0.0	3.3	7.2	0.0	4.4	13
14	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	3.0	7.2	0.0	4.1	14
15	0.0	0.0	0.0	0.0	6.9	0.0	0.0	2.5	3.1	7.1	0.0	4.0	15
16	0.0	0.0	0.0	0.0	7.1	0.0	0.0	3.9	3.1	7.1	0.0	4.0*	16
17	0.0	0.0	0.0	0.0*	7.0	0.0	0.0*	3.9	3.1	7.2*	0.0	3.9	17
18	0.0	0.0	0.0	0.0	5.5	0.0	0.0	3.9	3.3	7.4	0.0	4.0	18
19	0.0	0.0	0.0	0.0	4.8	0.0*	0.0	3.9	3.5	7.3	0.0	4.0	19
20	0.0	0.0	0.0	0.0	5.2	0.0	0.0	3.5	3.7	7.2	0.0	3.9	20
21	0.0	0.0	0.0	0.0	5.0	0.0	0.0	3.3	3.4	7.2	0.0	3.9	21
22	0.0	0.0	0.0	0.0	4.5	0.0	0.0	3.3*	3.0	7.1	0.0	3.9	22
23	0.0*	0.0	0.0	0.0	2.0	0.0	0.0	3.3	3.3	7.3	0.0	3.9	23
24	0.0	0.0	0.0	0.0	0.1	0.0	0.0	3.3	3.7	7.3	0.0	4.0	24
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	1.6*	7.2	0.0	3.9	25
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	6.9	0.0	3.8	26
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	6.3	0.0	3.7	27
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	6.0	0.0	3.8	28
29	0.0	0.0	0.0	0.0		0.0	0.0	4.0	0.0	5.8	0.0	3.9	29
30	0.0	0.0	0.0	0.0		0.0	0.0	4.1	0.0	5.8	0.0	4.0*	30
31	0.0		0.0	8.7E		0.0		4.0		5.4	0.0		31
MEAN	0.0	0.0	0.0	0.3	4.1	0.0	0.0	2.0	3.0	6.4	1.1	3.6	MEAN
MAX.	0.00	0.0	0.0	8.7E	7.1	0.0	0.0	4.1	4.2	7.4	5.4	4.6	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MIN
AC.FT.				17	228			125	176	391	65	215	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
1.7	NR					NR					1217

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
36 03 00	118 58 18	NE 5 22S 28E				1948-DATE		1948		0.00	LOCAL

Station located 2.8 mi. SE of Porterville approximately 1000 ft. below head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association.

TABLE B-54

DAILY MEAN DISCHARGE

POPLAR DITCH NEAR POPTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
C03960	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	0.0	0.0*	3.3E	0.1	48	0.0	0.0*	0.0*	0.0	0.0*	103 *	85	1
2	0.0	0.0	3.4E	0.1	72	0.0	0.0	0.0	9.2	0.0	104	84 *	2
3	0.0	0.0	3.3#	0.0*	76	0.0	0.0	0.0	23 *	0.0	102	84	3
4	0.0	0.0	3.3E	0.0	75	0.0	0.0	0.0	26	0.0	103	83	4
5	0.0	0.1	3.2E	0.0	75 *	0.0	0.0	0.0	29	0.0	102	82	5
6	0.0	0.3	1.2E	0.0	75	0.0*	0.0	0.0	29 *	0.0	99	81	6
7	0.0	0.4	0.5	0.0	76	0.0	0.0	0.0	26	0.0	99	80	7
8	0.0*	0.3	0.5	0.0	76	0.0	0.0	0.0	23	14	99	81	8
9	0.0	0.3	0.3	0.0	77	0.0	0.0	9.4	24	55	98	82	9
10	0.0	0.3	0.3	0.0	76	0.0	0.0	25	24	100	97	82	10
11	0.0	0.4	0.4	0.0	74	7.3	0.0	27	24	109 *	97	82	11
12	0.0	0.4	0.2	0.0	70	26	0.0	27	24	104 *	96	83	12
13	0.0	0.3	0.2	0.0	73	32	0.0	29 *	12	108	95	47	13
14	0.0	0.2	0.2	0.0	75 *	32 *	0.0	26	0.0	108	96	1.9	14
15	0.0	0.1	0.3	0.0	75	33	0.0	23	0.0	105 *	95	0.8	15
16	0.0	0.1	0.3	0.0	75	39	0.0	23	0.0	105	94	0.6*	16
17	0.0	0.0	0.2	0.0	76	38	0.0*	23	0.0	106 *	94	0.6	17
18	0.0	0.0	0.1	0.0	37	36	0.0	23	9.8	107	94	0.6	18
19	0.0	0.0	0.0	0.0	0.2	31 *	0.0	24	36	105	95	0.6	19
20	0.0	0.2	0.0	0.0	0.0	27	0.0	24	46	103	95	0.7	20
21	0.0	0.5	0.0	0.0	0.0	24	0.0	13	48	101	98	0.7	21
22	0.0	1.1	0.0	0.0	0.0	14	0.0	0.0	50	99	100	0.7	22
23	0.0	1.4	0.0	0.0	0.0	1.5	0.0	0.0	48 *	96	100	0.7	23
24	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	47	93	100	0.7	24
25	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	47	92 *	100	0.8	25
26	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	46	94	100	0.8	26
27	0.0	1.1	0.1	0.0	0.0	0.0	0.0	0.1	45	95	98	0.8	27
28	0.0	3.2E	0.1	0.0	0.0	0.0	0.0	0.2	42	97	86	3.2	28
29	0.0	3.2E	0.1	0.0		0.0	0.0	0.0	22	98	85	15	29
30	0.0	3.2E	0.1	0.1		0.0	0.0	0.0	0.0	101	85	14 *	30
31	0.0		0.1	19		0.0		0.0		103	85		31
MEAN	0.0	0.7	0.7	0.6	45.8	11.0	0.0	9.6	25.3	74.1	96.6	36.0	MEAN
MAX	0.0	3.2E	3.4E	19.0	77.0	39.0	0.0	29.0	50.0	109	104	85.0	MAX
MIN.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	0.6	MIN.
AC.FT.		41	43	38	2541	676		588	1507	4558	5939	2141	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
25.0	114	3.42	7	10	2220	0.0		10	1	0000	18070

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M O.B.&M.	OF RECORD C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF DATUM
36 03 18	119 00 54	SW36 21S 27E				APR 42-DATE		1942		0.00	LOCAL

Station located 1.0 mi. S of Porterville approximately 4750 ft. below head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association.

TABLE B-55

DAILY MEAN DISCHARGE

HUBBS-MINOR DITCH AT PORTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
C03925	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	NR	NR	NR	NR	NR	0.0	0.0*	0.0*	12	12 *	16 *	6.6	1
2	NR	NR	NR	NR	0.0	0.0	0.0	0.0	12	14	16	7.6*	2
3	NR	NR	NR	NR	0.0	0.0	0.0	0.0	13 *	14	15	17	3
4	NR	NR	NR	NR	0.0	0.0	0.0	0.0	12	14	15	19	4
5	NR	NR	NR	NR	0.0	0.0	0.0	0.0	10	14	14	18	5
6	NR	NR	NR	NR	NR	0.0*	0.0	0.0	6.3*	14	11	16	6
7	NR	NR	NR	NR	NR	0.0	0.0	0.0	2.7	14	5.6	13	7
8	NR	NR	NR	NR	NR	0.0	0.0	0.0	2.8	13	8.1	9.2	8
9	NR	NR	NR	NR	NR	0.0	0.0	0.0	2.0	12	7.1	5.7	9
10	NR	NR	NR	NR	NR	0.0	0.0	0.0	2.1	12	7.1	5.1	10
11	NR	NR	NR	NR	2.5*	0.0	0.0	0.0	2.7	12	6.0	4.8	11
12	NR	NR	NR	NR	10	3 E	0.0	0.0	2.6	13	4.5	9.6	12
13	NR	NR	NR	NR	12 *	5 E	0.0	0.0	2.8	13	4.8	15	13
14	NR	NR	NR	NR	13	17 #	0.0	0.5	2.3	13	6.6	14	14
15	NR	NR	NR	NR	14	10 E	0.0	4.0	8.7	14	2.8*	13	15
16	NR	NR	NR	NR	14	10 E	0.0	5.1*	12	15	0.0	13 *	16
17	NR	NR	NR	NR	14	5 E	0.0*	5.7	14	15	2.5	13	17
18	NR	NR	NR	NR	5.8	5 F	0.0	6.2	13	16	5.1	16	18
19	NR	NR	NR	NR	0.0	6 #	0.0	7.8	13	15	5.7	18	19
20	NR	NR	NR	NR	0.0	0.5	0.0	14	13	14	4.7	17	20
21	NR	NR	NR	NR	0.0	0.0	0.0	22	14	14	7.1	16	21
22	NR	NR	NR	NR	0.0	0.0	0.0	22	17	14	9.9	16	22
23	NR	NR	NR	NR	0.0	0.0	0.0	22	20	14	10	17	23
24	NR	NR	NR	NR	0.0	0.0	0.0	22	15	13	11	14	24
25	NR	NR	NR	NR	0.0*	0.0	0.0	22	8.6	14	11	13	25
26	NR	NR	NR	NR	0.0	0.0	0.0	17	13	14	9.6	13	26
27	NR	NR	NR	NR	0.0	0.0	0.0	9.0	13	14	5.2	13	27
28	NR	NR	NR	NR	0.0	0.0	0.0	8.0	13	14	3.3	16	28
29	NR	NR	NR	NR		0.0	0.0	8.0	13	14	6.5	15	29
30	NR	NR	NR	NR		0.0	0.0	8.6	12	15	6.1	16 *	30
31	NR		NR	NR		0.0		1.1*		16	6.7		31
MEAN	NR	NR	NR	NR	NR	2.0E	0.0	6.6	9.9	14	7.9	13	MEAN
MAX.	NR	NR	NR	NR	NR	17 E	0.0	22	20	16	16	19	MAX
MIN	NR	NR	NR	NR	NR	0.0	0.0	0.0	2.0	12	0.0	4.8	MIN.
AC.FT.	NR	NR	NR	NR	NR	122 E		407	590	851	483	793	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *
a - See note (a) below

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
											a 3415

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
36 03 27	119 02 02	NW35 21S 27E				DEC 42-DATE		1942		0.00	LOCAL

Station located 1.1 mi. SW of Porterville, approximately 3400 ft. below head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association.

(a) During periods of no record the recorder at this station was deactivated. This recorder was activated prior to anticipated diversion periods upon notification from the Tule River Association. It is assumed there was no flow during the "no record" periods.

TABLE B-56

DAILY MEAN DISCHARGE

RHODES-FINE DITCH NEAR PORTERVILLE

IN SECOND FEET

STATION NO.	WATER YEAR
C03940	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DAY
1	NR	NR	NR	NR	NR	0.0	NR	18 *	7.7	12 *	NR	NR	1
2	NR	NR	NR	NR	NR	0.0	NR	22	2.4	14	NR	NR	2
3	NR	NR	NR	NR	NR	0.0	NR	19	8.7*	19	NR	NR	3
4	NR	NR	NR	NR	NR	0.0	NR	19	16	12	NR	NR	4
5	NR	NR	NR	NR	NR	0.0	NR	18	18	7.0	NR	NR	5
6	NR	NR	NR	NR	NR	NR	NR	20	18	7.4	NR	NR	6
7	NR	NR	NR	NR	NR	NR	NR	19	18	4.1	NR	NR	7
8	NR	NR	NR	NR	NR	NR	NR	20	18	2.6	NR	NR	8
9	NR	NR	NR	NR	NR	NR	NR	25	16	0.0	NR	NR	9
10	NR	NR	NR	NR	NR	NR	NR	28	16	0.0	NR	NR	10
11	NR	NR	NR	NR	NR	NR	NR	27	19	0.0	NR	NR	11
12	NR	NR	NR	NR	0.0	NR	NR	27	18	0.0	NR	NR	12
13	NR	NR	NR	NR	0.0*	NR	NR	27	20	0.0	NR	NR	13
14	NR	NR	NR	NR	0.0	NR	NR	27	16	0.0	NR	NR	14
15	NR	NR	NR	NR	0.0	NR	NR	26	7.2	0.0	NR	NR	15
16	NR	NR	NR	NR	0.0	NR	NR	22 *	8.2	0.0	NR	NR	16
17	NR	NR	NR	NR	0.0	NR	NR	21	6.5	0.0	NR	NR	17
18	NR	NR	NR	NR	0.0	NR	0.0	17	5.6	0.0	NR	NR	18
19	NR	NR	NR	NR	0.0	NR	0.0	6.8	7.2	0.0	NR	NR	19
20	NR	NR	NR	NR	0.0	NR	0.0	0.0	15	0.0	NR	NR	20
21	NR	NR	NR	NR	0.0	NR	0.0	4.9	18	0.0	NR	NR	21
22	NR	NR	NR	NR	0.0	NR	0.0	13	18	0.0	NR	NR	22
23	NR	NR	NR	NR	0.0	NR	0.0	13	16	0.0	NR	NR	23
24	NR	NR	NR	NR	0.0	NR	2.1	13	18	0.0	NR	NR	24
25	NR	NR	NR	NR	0.0*	NR	9.5	12	17	0.0*	NR	NR	25
26	NR	NR	NR	NR	0.0	NR	13	13	19	0.0	NR	NR	26
27	NR	NR	NR	NR	0.0	NR	14	19	19	0.0	NR	NR	27
28	NR	NR	NR	NR	0.0	NR	10	18	18	0.0	NR	NR	28
29	NR	NR	NR	NR		NR	15	16	17	0.0	NR	NR	29
30	NR	NR	NR	NR		NR	15	16	17	0.0	NR	NR	30
31	NR		NR	NR		NR		17		0.0	NR		31
MEAN	NR	NR	NR	NR	NR	NR	NR	18	15	2.5	NR	NR	MEAN
MAX	NR	NR	NR	NR	NR	NR	NR	28	20	19	NR	NR	MAX.
MIN.	NR	NR	NR	NR	NR	NR	NR	0.0	2.4	0.0	NR	NR	MIN.
AC.FT.	NR	NR	NR	NR	NR	NR	NR	1120	872	155	NR	NR	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day
# – E and *
a – See note (a) below

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
											a 2303

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
			OF RECORD					PERIOD			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	FROM	TO	ZERO ON GAGE	REF DATUM
36 03 26	119 04 13	SE32 21S 27E				DEC 42-DATE		1942		0.00	LOCAL

Station located 3.1 mi. SW of Porterville, approximately 3100 ft. below head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between Department of Water Resources and the Tule River Association.

(a) During periods of "no record" the recorder at this station was deactivated. This recorder was activated prior to anticipated diversion periods upon notification from the Tule River Association. It is assumed there was no flow during the "no record" periods.

TABLE B-57

DAILY MEAN DISCHARGE

WOODS-CENTRAL DITCH NEAR PORTERVILLE

IN SECOND FEET

STATION NO	WATER YEAR
C03948	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	NR	NR	NR	NR	45 E	NR	NR	NR	NR	0.0*	188 *	NR	1
2	NR	NR	NR	NR	80	NR	NR	NR	NR	45	188	NR	2
3	NR	NR	NR	NR	89	NR	NR	NR	NR	107	187	NR	3
4	NR	NR	NR	NR	101	NR	NR	NR	NR	149	189	NR	4
5	NR	NR	NR	NR	98 *	NR	NR	NR	NR	150 *	190	NR	5
6	NR	NR	NR	NR	104	NR	NR	NR	NR	153 *	190	NR	6
7	NR	NR	NR	NR	107	NR	NR	NR	NR	155	195	NR	7
8	NR	NR	NR	NR	108	NR	NR	NR	NR	155 *	66 *	NR	8
9	NR	NR	NR	NR	108	NR	NR	NR	NR	147	0.0	NR	9
10	NR	NR	NR	NR	100	NR	NR	NR	NR	137	0.0	NR	10
11	NR	NR	NR	NR	91	NR	NR	NR	NR	155	0.0	NR	11
12	NR	NR	NR	NR	88	NR	NR	NR	NR	155 *	0.0	NR	12
13	NR	NR	NR	NR	90	NR	NR	NR	NR	149	0.0	NR	13
14	NR	NR	NR	NR	86 *	NR	NR	NR	NR	149	0.0	NR	14
15	NR	NR	NR	NR	89	NR	NR	NR	NR	150	0.0*	NR	15
16	NR	NR	NR	NR	94	NR	NR	NR	NR	149 *	NR	NR	16
17	NR	NR	NR	NR	95	NR	NR	NR	NR	161 *	NR	NR	17
18	NR	NR	NR	NR	54	NR	NR	NR	NR	179 *	NR	NR	18
19	NR	NR	NR	NR	0.0	NR	NR	NR	NR	185 *	NR	NR	19
20	NR	NR	NR	NR	0.0	NR	NR	NR	NR	170	NR	NR	20
21	NR	NR	NR	NR	0.0	NR	NR	NR	NR	169	NR	NR	21
22	NR	NR	NR	NR	0.0	NR	NR	NR	NR	179	NR	NR	22
23	NR	NR	NR	NR	0.0	NR	NR	NR	0.0*	179	NR	NR	23
24	NR	NR	NR	NR	0.0	NR	NR	NR	0.0	178	NR	NR	24
25	NR	NR	NR	NR	0.0*	NR	NR	NR	0.0	178 *	NR	NR	25
26	NR	NR	NR	NR	NR	NR	NR	NR	0.0	179 *	NR	NR	26
27	NR	NR	NR	NR	NR	NR	NR	NR	0.0	180	NR	NR	27
28	NR	NR	NR	NR	NR	NR	NR	NR	0.0	184	NR	NR	28
29	NR	NR	NR	NR		NR	NR	NR	0.0	183	NR	NR	29
30	NR	NR	NR	NR		NR	NR	NR	0.0	185	NR	NR	30
31	NR		NR	12 E		NR		NR		187 *	NR		31
MEAN	NR	NR	NR	NR	NR	NR	NR	NR	NR	154	NR	NR	MEAN
MAX.	NR	NR	NR	NR	NR	NR	NR	NR	NR	187	NR	NR	MAX
MIN	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.0	NR	NR	MIN
AC.FT.	NR	NR	NR	NR	NR	NR	NR	NR	NR	9483	NR	NR	AC.FT.

E - Estimated
NR - No Record
* - Discharge measurement or observation of no flow made on this day
# - E and *
a - See note (a) below

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
											a 15500

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
36 04 18	119 05 48	SE30 21S 27E				DEC 42-DATE		1942		0.00	LOCAL

Station located 4.5 mi. W of Porterville, approximately 100 ft. below head. This is regulated diversion from Tule River. This station is operated under cooperative agreement between the Department of Water Resources and the Tule River Association.

(a) During periods of no record the recorder at this station was deactivated. This recorder was activated prior to anticipated diversion periods upon notification from the Tule River Association. It is assumed there was no flow during the "no record" periods.

TABLE B-58

DAILY MEAN DISCHARGE

KERN RIVER NEAR BAKERSFIELD

IN SECOND FEET

STATION NO	WATER YEAR
C05150	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	363	254	183	191	493	436	609	620	780	2203	2120	1233	1
2	378	254	183	192	429	440	603	664	714	2160	2061	1226	2
3	378	215	197	190	386	441	618	629	718	2192	2021	1280	3
4	386	216	220	195	384	439	668	669	735	2204	2005	1347	4
5	362	218	216	184	376	421	677	710	773	2199	1995	1124	5
6	337	213	210	195	381	437	684	740	831	2086	1936	975	6
7	382	210	216	192	377	460	723	888	867	2042	1982	900	7
8	388	205	201	193	379	432	687	953	940	2087	2002	849	8
9	385	203	202	188	385	440	721	1119	941	2062	1982	934	9
10	407	208	213	189	435	440	702	1011	970	2011	1950	1097	10
11	415	210	211	192	456	472	662	925	940	1998	1945	1081	11
12	465	206	219	194	453	513	644	882	761	1943	1885	1087	12
13	454	208	186	174	472	515	624	846	753	2002	1942	1060	13
14	428	210	191	153	463	533	641	801	869	2016	2011	1035	14
15	408	219	198	184	454	656	737	774	970	2007	2105	1031	15
16	417	210	211	188	454	634	770	781	1011	2026	2103	1028	16
17	411	202	222	182	447	599	665	792	1232	2012	2053	1012	17
18	417	204	218	175	457	573	625	803	1533	2044	2015	1036	18
19	416	195	209	179	453	579	620	813	1630	2054	1992	1047	19
20	415	194	211	178	458	578	635	809	1760	2015	1942	1149	20
21	407	210	180	180	453	577	645	887	1896	2017	1981	1154	21
22	380	216	189	187	445	587	624	1011	1927	2031	2029	1183	22
23	341	210	191	186	451	573	624	1044	1748	2022	1977	1237	23
24	339	203	189	177	456	574	624	1006	1959	2035	1808	1284	24
25	336	196	176	176	450	552	651	1082	2118	2076	1669	1281	25
26	299	195	136	177	449	555	647	1155	2157	2105	1762	1336	26
27	289	198	133	170	447	613	625	1191	2143	2176	1742	1365	27
28	268	200	161	178	445	681	624	1079	2150	2194	1738	1359	28
29	250	201	165	186		640	621	980	2277	2150	1648	1340	29
30	248	193	179	308		619	619	983	2262	2119	1655	1399	30
31	237		188	451		608		959		2099	1526		31
MEAN	368	209	194	197	435	536	654	891	1346	2077	1922	1149	MEAN
MAX	465	254	222	451	493	681	770	1191	2277	2204	2120	1399	MAX
MIN	237	193	133	153	376	421	603	620	714	1943	1526	849	MIN.
AC.FT.	22623	12448	11909	12067	24175	32959	38914	54756	80063	127710	118179	68368	AC.FT.

E – Estimated
NR – No Record
* – Discharge measurement or observation of no flow made on this day.
\# – E and *

WATER YEAR SUMMARY

MEAN	MAXIMUM					MINIMUM					TOTAL
DISCHARGE	DISCHARGE	GAGE HT	MO	DAY	TIME	DISCHARGE	GAGE HT	MO	DAY	TIME	ACRE-FEET
832	2323		6	30							604171

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
35 26 9	118 56 8	SW 2 29S 28E	36000	14.2	11-19-50	93-DATE					

Also known as "Kern River at First Point." Station located 5 mi. NE of Bakersfield. Tabulated discharge is the computed regulated flow and is computed from noon to noon beginning at noon of day shown. Records furn. by Kern County Land Company. Drainage area is 2,420 sq. mi.

TABLE B-59

DAILY MEAN GAGE HEIGHT

TULARE LAKE

IN FEET

STATION NO	WATER YEAR
C03110	1963

DAY	OCT	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	DAY
						D R Y							

E - Estimated
NR - No Record
NF No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
30 03 10	119 49 35			196.8	6-28-41		FEB 37-DATE	1937		0.00	USCGS

Station located 2.2 mi. SW of Chatom Ranch, 6 mi. SW of Corcoran on south end of El Rico Bridge. Tulare Lake receives water from Kings, Kaweah, and Tule Rivers during high-water periods and occasionally from Kern River, Deer Creek, and several small intermittent streams. Elevation at lowest point of lake bed is now about 180 ft. U.S.G.S. datum. Records furn. by Tulare Lake Basin Water Storage District.

TABLE B-60

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER BELOW FRIANT

IN FEET

STATION NO	WATER YEAR
B07885	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	2.18	2.05	2.08	1.95	1.85	2.05	2.04	1.93	2.38	2.45	2.45	2.36	1
2	2.18	2.09	2.08	1.95	1.62	2.08	2.03	1.92	2.37	2.41	2.49	2.36	2
3	2.19	2.10	2.08	1.95	1.60	2.10	2.03	1.91	2.37	2.38	2.48	2.35	3
4	2.18	2.10	2.06	1.95	1.59	2.09	2.02	1.90	2.37	2.37	2.48	2.35	4
5	2.17	2.10	2.02	1.94	1.70	2.09	2.02	1.89	2.37	2.37	2.43	2.32	5
6	2.23	2.09	2.01	1.94	1.76	2.08	2.06	1.87	2.37	2.37	2.40	2.27	6
7	2.29	2.10	2.01	1.94	1.90	2.07	2.14	1.85	2.37	2.37	2.39	2.25	7
8	2.29	2.14	2.02	1.95	1.95	2.08	2.03	1.86	2.37	2.40	2.39	2.25	8
9	2.29	2.12	2.03	1.95	2.04	2.09	1.86	1.89	2.37	2.44	2.38	2.18	9
10	2.25	2.11	2.05	1.95	2.12	2.08	1.84	1.87	2.37	2.45	2.38	2.10	10
11	2.20	2.11	2.05	1.95	1.93	2.11	1.83	1.87	2.29	2.44	2.38	2.10	11
12	2.20	2.11	2.05	1.95	1.92	2.16	1.82	1.86	2.23	2.55	2.38	2.10	12
13	2.21	2.11	2.05	1.96	2.00	2.16	1.82	1.85	2.19	2.54	2.38	2.10	13
14	2.22	2.11	2.05	1.96	1.85	2.17	1.98	1.88	2.13	2.54	2.38	2.10	14
15	2.16	2.11	2.06	1.96	1.70	2.19	1.99	1.99	2.15	2.54	2.38	2.10	15
16	2.13	2.11	2.06	1.96	1.66	2.22	1.91	2.09	2.15	2.49	2.40	2.08	16
17	2.12	2.11	2.02	1.96	1.65	2.21	1.87	2.17	3.26	2.45	2.45	2.06	17
18	2.05	2.11	1.97	1.96	1.70	2.04	1.85	2.25	4.64	2.44	2.39	2.06	18
19	1.99	2.11	1.97	1.96	1.80	2.05	1.88	2.32	5.40	2.44	2.40	2.06	19
20	1.95	2.09	1.97	1.96	1.80	2.10	1.90	2.34	5.60	2.43	2.40	2.06	20
21	1.95	2.06	1.97	1.96	1.83	2.09	2.07	2.41	5.57	2.43	2.40	2.06	21
22	1.97	2.06	1.97	1.99	1.90	2.10	1.96	2.43	5.03	2.43	2.40	2.06	22
23	2.12	2.06	1.98	2.03	1.95	2.10	1.91	2.43	3.99	2.42	2.40	2.06	23
24	2.19	2.06	1.98	2.03	2.02	2.10	1.89	2.43	2.98	2.36	2.39	2.06	24
25	2.18	2.06	1.98	2.03	2.03	2.10	1.88	2.42	2.20	2.28	2.39	2.06	25
26	2.04	2.06	1.99	2.03	2.04	2.11	2.21	2.42	2.45	2.28	2.38	2.05	26
27	2.12	2.07	2.01	2.03	2.04	2.11	2.06	2.41	2.45	2.28	2.37	2.05	27
28	2.13	2.07	2.02	2.03	2.05	2.36	1.98	2.42	2.46	2.34	2.37	2.07	28
29	2.12	2.07	2.02	2.04		1.96	1.97	2.42	2.45	2.37	2.37	2.10	29
30	2.07	2.08	2.02	2.02		1.87	1.95	2.42	2.45	2.39	2.36	2.11	30
31	2.07		NR	2.00		1.93		NR		2.40	2.36		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
6-20-63	1300	5.73									

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
36 59 04	119 43 24	SW7 11S 21E	77,200	23.8	12/11/37	OCT 07-DATE	OCT 07-DATE	1938	---	294.00	USGS

Station located 0.5 miles W of Friant Dam. Flow regulated by Millerton Lake.
Records furnished by U.S.G.S. Drainage area is 1,675 sq. mi.

TABLE B-61

DAILY MEAN GAGE HEIGHT

CHOWCHILLA RIVER NEAR RAYMOND

IN FEET

STATION NO	WATER YEAR
864200	1963

DAY	OCT.	NOV.	DEC.	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	NR	NR	NR	NR	78.19	NR	70.46	70.94	NR	NR	NR	NR	1
2	NR	NR	NR	NR	NR	NR	70.37	70.83	NR	NR	NR	NR	2
3	NR	NR	NR	NR	NR	NR	70.23	70.75	NR	NR	NR	NR	3
4	NR	NR	NR	NR	NR	NR	70.20	70.65	NR	NR	NR	NR	4
5	NR	NR	NR	NR	NR	NR	70.22	70.56	NR	NR	NR	NR	5
6	NR	NR	NR	NR	NR	NR	70.24	69.93	NR	NR	NR	NR	6
7	NR	NR	NR	NR	NR	NR	71.60	70.55	NR	NR	NR	NR	7
8	NR	NR	NR	NR	NR	NR	72.58	70.52	NR	NR	NR	NR	8
9	NR	NR	NR	NR	NR	NR	71.19	71.20	NR	NR	NR	NR	9
10	NR	NR	NR	NR	72.23	NR	70.95	70.69	NR	NR	NR	NR	10
11	NR	NR	NR	NR	70.98	NR	70.78	70.66	NR	NR	NR	NR	11
12	NR	NR	NR	NR	70.42	NR	70.71	70.61	NR	NR	NR	NR	12
13	NR	NR	NR	NR	71.18	NR	70.67	70.46	NR	NR	NR	NR	13
14	NR	NR	NR	NR	71.15	NR	72.78	70.41	NR	NR	NR	NR	14
15	NR	NR	NR	NR	70.41	NR	73.43	70.37	NR	NR	NR	NR	15
16	NR	NR	NR	NR	70.24	NR	72.11	70.29	NR	NR	NR	NR	16
17	NR	NR	NR	NR	70.09	70.13	71.55	70.23	NR	NR	NR	NR	17
18	NR	NR	NR	NR	70.00	70.13	71.27	70.17	NR	NR	NR	NR	18
19	NR	NR	NR	NR	NR	NR	71.55	70.12	NR	NR	NR	NR	19
20	NR	NR	NR	NR	NR	NR	71.97	70.06	NR	NR	NR	NR	20
21	NR	NR	NR	NR	NR	NR	73.33	NR	NR	NR	NR	NR	21
22	NR	NR	NR	NR	NR	NR	72.43	NR	NR	NR	NR	NR	22
23	NR	NR	NR	NR	NR	NR	72.02	NR	NR	NR	NR	NR	23
24	NR	NR	NR	NR	NR	70.85	71.70	NR	NR	NR	NR	NR	24
25	NR	NR	NR	NR	NR	70.07	71.49	NR	NR	NR	NR	NR	25
26	NR	NR	NR	NR	NR	69.83	72.14	NR	NR	NR	NR	NR	26
27	NR	NR	NR	NR	NR	69.68	71.82	NR	NR	NR	NR	NR	27
28	NR	NR	NR	NR	NR	71.65	NR	NR	NR	NR	NR	NR	28
29	NR	NR	NR	NR		71.55	71.18	NR	NR	NR	NR	NR	29
30	NR	NR	NR	NR		70.79	71.03	NR	NR	NR	NR	NR	30
31	NR		NR	NR		70.53		NR		NR	NR		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-31-63	1850	83.2	2-13-63	1410	71.8	4-14-63	1100	78.6			
2- 1-63	0600	83.9	3-28-63	1045	77.4	4-21-63	0100	75.1			
2-10-63	1125	74.3	4-7-63	2100	78.5						

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37 15 36	119 56 42	SE 1 8S 22E	8497E	83.9	2- 1-63	NOV 59-DATE	NOV 59-DATE	1959		0.00	USCGS

Station located 6.0 mi. NW of Raymond on Raymond Road. Elevation of station is approximately 600 ft. USCGS datum. This station was installed in cooperation with Madera County and Chowchilla Water District. It is a flood control warning station, equipped with a Stevens Surface Detector and Telemark. Low flows are not recorded. Prior to 1962, high flow records were insufficient for publication. Discharge measurements and partial flow records are available in DWR files. In order to machine process this station, the recorder datum was changed. To obtain true elevations add 500 feet to all of the above gage heights.

TABLE B-62

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER ABOVE SAND SLOUGH NEAR EL NIDO

IN FEET

STATION NO	WATER YEAR
B07575	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	NR	NR	NR	NR	NR	0.65	01.88	2.32	0.99	NF	NF	NF	1
2	NR	NR	NR	NR	4.69	0.61	01.52	2.11	0.87	NF	NF	NF	2
3	NR	NR	NR	NR	5.39	0.58	01.65	2.08	0.60	NF	NF	NF	3
4	NR	NR	NR	NR	4.41	0.61	02.10	2.01	0.45	NF	NF	NF	4
5	NR	NR	NR	NR	3.02	0.58	02.09	1.71	NF	NF	NF	NF	5
6	NR	NR	NR	NR	2.21	0.54	01.93	1.42	NF	NF	NF	NF	6
7	NR	NR	NR	NR	1.79	0.55	01.96	1.27	NF	NF	NF	NF	7
8	NR	NR	NR	0.78	1.77	0.58	01.97	1.42	NF	NF	NF	NF	8
9	NR	NR	NR	1.56	1.85	0.63	02.40	1.06	NF	NF	NF	NF	9
10	NR	NR	NR	1.85	2.02	0.65	03.23	0.92	NF	NF	NF	NF	10
11	NR	NR	NR	1.90	2.34	0.67	01.96	0.96	NF	NF	NF	NF	11
12	NR	NR	NR	1.81	3.30	0.57	01.65	2.25	NF	NF	NF	NF	12
13	NR	NR	NR	1.47	2.78	0.56	01.57	3.05	NF	NF	NF	NF	13
14	NR	NR	NR	1.24	2.24	0.60	01.41	3.16	NF	NF	NF	NF	14
15	NR	NR	NR	1.15	2.78	0.55	01.29	2.94	NF	NF	NF	NF	15
16	NR	NR	NR	1.11	2.79	0.55	02.52	2.82	NF	NF	NF	NF	16
17	NR	NR	NR	1.07	2.30	0.51	04.25	3.17	NF	NF	NF	NF	17
18	NR	NR	NR	1.04	1.98	0.49	03.51	3.03	NF	NF	NF	NF	18
19	NR	NR	NR	0.99	1.78	0.52	02.64	2.90	NF	NF	NF	NF	19
20	NR	NR	NR	0.91	1.66	0.55	02.36	2.64	NF	NF	NF	NF	20
21	NR	NR	NR	0.79	1.69	0.58	02.51	2.23	NF	NF	NF	NF	21
22	NR	NR	NR	0.65	1.45	0.63	03.31	1.78	NF	NF	NF	NF	22
23	NR	NR	NR	0.49	1.26	0.58	04.33	1.30	NF	NF	NF	NF	23
24	NR	NR	NR	NR	1.13	0.57	03.90	1.06	NF	NF	NF	NF	24
25	NR	NR	NR	NR	1.00	0.52	03.22	0.87	NF	NF	NF	NF	25
26	NR	NR	NR	NR	0.84	0.50	02.80	0.65	NF	NF	NF	NF	26
27	NR	NR	NR	NR	0.75	0.55	02.68	0.61	NF	NF	NF	NF	27
28	NR	NR	NR	NR	0.71	0.63	03.35	0.72	NF	NF	NF	NF	28
29	NR	NR	NR	NR		0.61	03.11	0.84	NF	NF	NF	NF	29
30	NR	NR	NR	NR		2.67	02.61	0.92	NF	NF	NF	NF	30
31	NR		NR	NR		2.48		0.90		NF	NF		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 2-63	1750	5.94	4-10-63	0430	4.36	5-14-63	0820	3.23			
2-12-63	1310	3.50	4-17-63	0950	4.40	5-17-63	1240	3.22			
3-30-63	1510	3.30	4-23-63	1410	4.36						

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37 06 36	120 35 24	NE31 9S 13E	2110	6.55	2/12/62	OCT 61-DATE	OCT 61-DATE	1961		0.00	USCGS

Station located 5 mi. NW of Santa Rita Bridge and 5 mi. W of El Nido. Flows sometimes affected by operation of control structures below station. During this period flows are not computed. Partial flow records and discharge measurement are available in the office of the San Joaquin Valley Branch of the Department of Water Resources. In order to machine process this station, the recorder datum was changed. To obtain true elevations add 100 feet to all of the above gage heights.

TABLE B-63

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER NEAR STEVINSON

IN FEET

STATION NO	WATER YEAR
B07400	1963

DAY	OCT.	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	60.97	60.70	60.74	60.82	63.25	62.18	65.34	65.85	62.10	61.31	61.17	61.12	1
2	61.03	60.71	60.67	60.82	65.14	62.09	65.09	64.95	62.21	61.39	61.15	61.15	2
3	60.99	60.72	60.64	60.82	67.87	61.99	64.59	64.45	62.25	61.56	61.10	61.15	3
4	60.95	60.94	60.64	60.82	68.84	61.90	64.11	64.01	62.25	61.69	61.18	61.14	4
5	61.16	61.14	60.63	60.78	67.99	61.85	63.44	63.95	62.17	61.85	61.24	61.14	5
6	61.23	61.14	60.64	60.74	66.69	61.74	63.39	63.53	62.16	61.89	61.32	61.14	6
7	61.17	60.99	60.63	61.29	65.43	61.64	64.08	63.19	62.26	61.89	61.40	61.13	7
8	61.09	60.88	60.64	62.00	64.26	61.56	64.22	62.84	62.33	61.76	61.44	61.08	8
9	60.99	60.77	60.64	62.11	63.41	61.49	64.12	62.61	62.45	61.71	61.43	61.02	9
10	60.87	60.75	60.64	62.02	64.74	61.44	63.96	62.47	62.35	61.78	61.39	60.96	10
11	60.88	60.78	60.64	61.83	65.88	61.38	64.21	62.44	62.46	61.70	61.32	60.95	11
12	60.88	60.81	60.64	61.53	66.74	61.33	64.42	63.54	62.37	61.56	61.36	60.97	12
13	60.94	60.83	60.64	61.65	67.16	61.29	64.38	63.65	62.49	61.43	61.39	61.03	13
14	60.88	60.82	60.64	61.68	67.70	61.27	64.26	63.14	62.70	61.36	61.35	61.25	14
15	60.81	60.81	60.66	61.64	68.54	61.27	64.17	63.06	62.70	61.42	61.37	61.48	15
16	60.81	60.81	60.81	61.43	68.47	61.30	65.09	62.92	62.55	61.40	61.32	61.56	16
17	60.79	60.80	60.88	61.24	67.44	61.29	65.90	62.71	62.54	61.26	61.25	61.55	17
18	60.79	60.78	61.12	61.13	66.44	61.43	66.43	62.43	62.47	61.22	61.21	61.49	18
19	60.78	60.70	61.19	61.05	65.63	61.58	66.30	62.21	62.21	61.18	61.17	61.71	19
20	60.76	60.67	61.21	61.02	64.97	61.53	65.90	61.98	61.89	61.22	61.23	61.87	20
21	60.75	60.71	61.21	61.00	64.51	61.46	65.87	61.89	61.67	61.26	61.18	62.12	21
22	60.73	60.76	61.19	60.97	64.12	61.44	66.40	61.84	61.55	61.26	61.14	62.32	22
23	60.72	60.75	61.14	60.95	63.39	61.42	67.26	61.79	61.51	61.14	61.09	62.36	23
24	60.73	60.72	61.12	60.96	63.03	61.80	67.59	61.77	61.55	61.11	61.13	62.34	24
25	60.74	60.69	61.10	61.10	62.81	62.11	67.38	61.86	61.72	61.12	61.22	61.96	25
26	60.75	60.69	61.06	61.02	62.63	61.88	66.96	61.84	61.79	61.15	61.32	61.97	26
27	60.75	60.72	60.95	60.94	62.44	61.92	66.60	61.92	61.74	61.18	61.44	61.67	27
28	60.74	60.73	60.87	60.89	62.31	62.06	66.57	62.04	61.59	61.15	61.51	61.52	28
29	60.73	60.73	60.86	60.91		63.44	66.53	62.18	61.52	61.12	61.32	61.42	29
30	60.71	60.75	60.83	61.02		65.67	66.33	62.25	61.40	61.13	61.21	61.38	30
31	60.71		60.81	61.52		65.70		62.24		61.19			31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 4-63	1040	68.9	4-18-63	1800	66.6	6-14-64	2400	62.8			
2-16-63	0000	68.8	4-24-63	1600	67.6						
3-30-63	2120	66.1	5- 1-63	0000	66.2						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 17 42	120 51 00	26 7S 10E	6060	73.04	2-17-62	OCT 61-DATE	MAY 61-DATE	1961		0.00	USCGS

Station located on bridge 2.3 miles south of Stevinson on Lander Avenue.

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

DAILY MEAN GAGE HEIGHT

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	[illegible]
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]		[illegible]	[illegible]		[illegible]		[illegible]		[illegible]	[illegible]		[illegible]

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	[illegible]	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	TO	ZERO ON GAGE	REF. DATUM
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]

[illegible]

TABLE B-64

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE

IN FEET

STATION NO	WATER YEAR
807375	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	54.59	54.51	54.55	NR	56.79	56.68	58.68	59.26	57.10	55.45	55.15	55.10	1
2	54.78	54.53	54.52	NR	57.82	56.55	58.56	58.57	57.06	55.46	55.06	55.12	2
3	54.71	54.43	54.51	NR	59.88	56.42	58.18	58.05	57.11	55.56	55.09	55.17	3
4	54.58	54.37	54.47	NR	61.36	56.28	57.83	57.69	57.15	55.71	55.25	55.22	4
5	54.54	54.53	54.37	NR	61.28	56.19	57.37	57.43	57.24	55.80	55.37	55.27	5
6	54.68	54.53	54.23	NR	60.20	56.08	57.21	57.23	56.65	55.84	55.42	55.29	6
7	54.70	54.46	54.16	NR	59.20	55.95	57.57	56.88	56.40	55.84	55.20	55.42	7
8	54.66	54.38	54.09	NR	58.22	55.86	57.82	56.66	56.35	55.84	55.07	55.28	8
9	54.62	54.32	NR	NR	57.58	55.88	57.72	56.46	56.31	55.76	55.06	55.23	9
10	54.38	54.41	NR	NR	58.27	55.96	57.61	56.46	56.29	55.71	55.28	54.98	10
11	54.29	54.46	NR	NR	59.30	56.01	57.76	57.50	56.32	55.63	55.26	54.94	11
12	54.29	54.57	NR	NR	60.10	56.02	57.94	58.11	56.25	55.56	55.27	55.04	12
13	54.27	54.60	NR	NR	60.68	55.93	57.92	58.26	56.26	55.36	55.46	55.18	13
14	54.46	54.62	NR	NR	61.12	55.90	57.81	57.64	56.44	55.28	55.37	55.38	14
15	54.38	54.61	NR	NR	61.74	55.95	57.64	57.07	56.55	55.38	55.26	55.57	15
16	54.33	54.60	NR	NR	61.98	55.90	57.93	56.86	56.47	55.43	55.18	55.63	16
17	54.27	54.60	NR	NR	61.52	55.79	58.70	56.69	56.39	55.31	55.12	55.59	17
18	54.24	54.63	NR	NR	60.68	55.86	59.23	56.58	56.38	55.14	55.13	55.56	18
19	54.28	54.60	NR	NR	59.84	55.95	59.38	56.90	56.52	55.10	55.13	55.67	19
20	54.21	54.59	NR	NR	59.17	55.99	59.04	57.18	56.49	55.10	55.13	55.70	20
21	54.17	54.59	NR	NR	58.69	55.85	58.94	57.38	56.17	55.13	55.17	55.74	21
22	54.17	54.61	NR	NR	58.35	55.84	59.18	57.59	55.96	55.18	55.14	55.84	22
23	54.18	54.63	NR	NR	57.89	55.99	59.92	57.65	55.75	55.09	55.00	55.82	23
24	54.17	54.67	NR	NR	57.51	56.10	60.47	57.74	55.58	55.00	55.11	55.71	24
25	54.22	54.70	NR	NR	57.32	56.33	60.52	57.77	55.57	55.02	55.26	55.59	25
26	54.28	54.68	NR	NR	57.12	56.34	60.21	57.30	55.71	55.04	55.29	55.48	26
27	54.40	54.62	NR	NR	56.95	56.34	59.88	56.83	55.70	55.06	55.33	55.36	27
28	54.43	54.55	NR	NR	56.79	56.43	59.81	57.26	55.66	55.00	55.51	55.22	28
29	54.43	54.57	NR	NR		56.85	59.78	57.79	55.54	55.18	55.38	55.11	29
30	54.54	54.57	NR	NR		58.30	59.65	57.64	55.51	55.28	55.24	55.06	30
31	54.53		NR	NR		59.02		57.33		55.27	55.23		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 3-63	2400	60.92	2- 6-63	1200	60.32	2-14-63	2400	61.47	2-17-63	1200	61.55
2- 4-63	2400	61.53	2-12-63	2400	60.43	2-15-63	2400	61.98			
2- 5-63	1200	61.32	2-13-63	2400	60.85	2-16-63	0900	62.04			

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 18 35	120 55 45		5910	71.14	4- 6-58	FEB 37-DATE	APR 37-DATE	1944	1957	-3.73	USCGS
								1957	1959	-3.77	USCGS
								1959		0.00	USCGS

Station located 30 ft. below Fremont Ford Bridge, 4.5 mi. W of Stevinson, 6.7 mi. above the Merced River. During periods of high flow, some water bypasses station through Mud Slough. Maximum discharge of record is for period 1944 to date. Records furn. by U.S.G.S. Drainage area is approx. 8,090 sq. mi. Flow records are published in U.S.G.S. report, "Surface Water Records of California."

TABLE B-65

DAILY MEAN GAGE HEIGHT

MERCED RIVER BELOW SNELLING

IN FEET

STATION NO	WATER YEAR
805170	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	5.67	4.95	4.88	4.95	6.46	9.29	08.26	8.27	10.90	6.27	5.94	5.79	1
2	5.11	4.92	4.89	4.96	5.74	7.09	08.25	8.28	10.92	6.31	5.94	5.84	2
3	4.95	4.95	4.89	4.94	5.51	5.80	08.27	8.26	11.22	6.35	5.94	5.76	3
4	4.90	5.01	4.94	4.92	5.44	5.69	08.24	8.25	10.97	6.43	5.95	5.75	4
5	4.87	5.02	4.93	4.97	5.43	5.61	08.19	8.07	9.75	6.32	5.94	5.78	5
6	4.89	5.02	4.93	5.06	7.55	5.58	08.43	7.59	9.73	5.94	5.87	5.81	6
7	4.94	5.03	4.92	5.14	7.36	5.55	08.60	7.87	9.41	5.84	5.85	5.75	7
8	4.93	5.02	4.90	5.14	9.21	5.62	08.43	9.24	8.67	5.87	5.94	5.73	8
9	4.90	5.00	4.93	5.15	9.33	6.02	08.25	11.02	8.94	5.84	5.92	5.79	9
10	4.87	5.00	4.91	5.15	9.46	6.07	07.82	12.33	8.52	5.83	5.93	5.74	10
11	4.87	4.99	4.93	5.14	9.31	5.90	07.79	11.85	6.73	5.88	5.95	5.73	11
12	4.88	4.97	4.94	5.14	9.31	5.79	07.82	11.45	6.54	5.89	5.95	5.69	12
13	4.91	4.96	4.91	5.16	9.59	5.73	07.81	10.10	6.44	5.86	5.95	5.84	13
14	5.01	4.93	4.95	5.14	9.38	5.74	08.14	9.20	6.43	5.86	5.97	5.78	14
15	5.00	4.90	5.23	5.15	9.35	5.75	08.15	8.98	6.40	5.87	5.99	5.78	15
16	5.06	4.90	5.45	5.17	9.32	5.74	08.09	9.11	7.82	5.88	5.95	5.79	16
17	5.08	4.90	5.33	5.19	9.32	5.77	07.93	10.52	10.92	5.93	5.97	5.80	17
18	5.06	4.91	5.21	5.20	9.30	5.81	08.22	11.51	10.85	6.02	5.96	5.90	18
19	4.99	4.93	5.15	5.26	9.31	5.72	08.44	11.65	10.86	6.06	5.87	5.86	19
20	5.03	4.92	5.14	5.30	9.30	5.64	08.35	11.82	10.26	6.03	5.85	5.75	20
21	5.02	4.91	5.12	5.30	9.30	5.58	08.33	11.86	10.18	6.04	5.71	5.73	21
22	5.00	4.91	5.11	5.30	9.30	5.55	08.21	11.92	9.18	6.06	5.83	5.74	22
23	5.00	4.91	5.10	5.32	9.28	5.51	08.24	11.99	8.44	6.09	5.86	5.74	23
24	4.97	4.91	5.10	5.32	9.28	5.51	08.88	11.91	8.18	6.11	5.89	5.76	24
25	4.96	4.93	5.08	5.32	9.28	5.49	09.13	10.88	7.40	6.08	5.88	5.62	25
26	4.97	4.93	5.03	5.34	9.28	5.51	09.47	10.81	6.89	6.08	5.84	5.58	26
27	4.95	4.97	4.98	5.33	9.27	5.53	09.30	11.57	7.16	6.01	5.85	5.54	27
28	4.94	4.92	4.95	5.32	9.28	6.61	09.09	11.80	7.45	5.99	5.76	5.55	28
29	4.95	4.89	4.94	5.33		8.70	08.74	11.08	7.31	5.99	5.75	5.51	29
30	4.93	4.89	4.96	5.43		8.51	08.61	10.93	6.58	6.03	5.78	5.51	30
31	4.95		4.96	5.97		8.27		10.75		6.00	5.77		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2-10-63	0300	9.9	5-10-63	0510	12.5	6-10-63	1030	9.7			
3- 1-63	1920	9.3	5-23-63	1850	12.0	6-17-63	1130	11.4			
4-26-63	1640	9.6	6- 4-63	0210	11.4						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 30 06	120 27 03	NE17 5S 14E	4910	12.51	5-10-63	NOV 58-DATE	NOV 58-DATE	1958		0.00	LOCAL

Station located 0.2 mi. below Merced-Snelling Highway Bridge, 1.4 mi. SW of Snelling. Flow regulated by Exchequer power plant and Lake McClure. Prior to November 1958, records available for a site 3.6 mi. downstream.

TABLE B-66

DAILY MEAN GAGE HEIGHT

MERCED RIVER AT CRESSEY

IN FEET

STATION NO	WATER YEAR
805155	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	11.32	10.82	10.43	10.49	12.03	14.94	13.78	13.98	17.03	11.13	10.29	10.40	1
2	11.34	10.82	10.43	10.49	12.33	14.47	13.80	13.82	17.13	10.75	10.33	10.43	2
3	11.23	10.83	10.43	10.50	11.38	11.90	13.80	13.78	17.34	10.82	10.35	10.42	3
4	11.13	10.83	10.40	10.49	11.02	11.20	13.82	13.75	17.69	10.93	10.39	10.46	4
5	11.05	10.83	10.43	10.48	10.84	10.83	13.72	13.72	16.07	10.98	10.46	10.46	5
6	11.00	10.82	10.44	10.48	10.66	10.80	13.80	13.33	15.42	10.96E	10.39	10.46	6
7	10.97	10.81	10.44	10.49	13.61	10.76	14.21	12.70	15.44	10.74E	10.29	10.41	7
8	10.94	10.82	10.45	10.51	13.23	10.66	14.19	14.07	14.57	10.51	10.16	10.39	8
9	10.94	10.83	10.54	10.50	14.86	10.64	13.84	15.36	13.87	10.33	10.17	10.40	9
10	10.92	10.83	10.52	10.50E	16.24	10.71	13.55	19.32	15.02	10.29	10.25	10.40	10
11	10.94	10.84	10.47	10.50E	15.42	10.89	13.31	18.97	12.76	10.30	10.35	10.42	11
12	10.93	10.82	10.47	10.50E	15.20	10.85	13.25	18.34	11.76	10.25	10.39	10.36	12
13	10.94	10.82	10.46	10.49E	16.00	10.73	13.24	17.11	11.45	10.23	10.23	10.49	13
14	10.94	10.82	10.46	10.49E	16.50	10.67	13.35	15.18	11.27	10.24	10.19	10.49	14
15	10.94	10.83	10.46	10.48E	15.37	10.69	13.73	14.81	11.10	10.29	10.20	10.56	15
16	10.94	10.82	10.69	10.48E	15.23	10.72	13.77	14.60	11.08	10.30	10.27	10.55	16
17	10.92	10.79	10.86	10.47E	15.16	10.80	13.71	15.35	15.22	10.26	10.32	10.61	17
18	10.91	10.80	10.85	10.47	15.13	10.77	13.57	17.81	16.97	10.27	10.41	10.62	18
19	10.89	10.80	10.77	10.48	15.09	10.75	13.81	18.22	17.04	10.16	10.41	10.69	19
20	10.88	10.78	10.67	10.49	15.07	10.69	13.98	18.50	16.38	10.32	10.32	10.81	20
21	10.87	10.79	10.62	10.49	15.05	10.65	14.42	18.66	16.06E	10.37	10.28	10.84	21
22	10.86	10.79	10.60	10.49	15.03	10.64	14.14	18.67	15.52E	10.41	10.30	10.78	22
23	10.85	10.45	10.58	10.49	15.00	10.65	13.98	18.83	15.04E	10.45	10.33	10.76	23
24	10.85	10.44	10.62	10.49	14.96	10.59	14.14	18.82	14.39E	10.43	10.36	10.80	24
25	10.86	10.44	10.56	10.44	14.95	10.54	14.68	17.99	13.80E	10.37	10.44	10.81	25
26	10.88	10.45	10.56	10.54	14.96	10.53	15.08	16.85	12.69E	10.37	10.45	10.81	26
27	10.87	10.47	10.54	10.63	14.96	10.54	15.20	17.64	11.83E	10.40	10.54	10.75	27
28	10.87	10.44	10.54	10.51	14.95	10.74	14.96	18.53	12.04	10.34	10.41	10.73	28
29	11.02	10.43	10.53	10.48		12.98	14.64	17.98	12.31	10.34	10.29	10.72	29
30	10.83	10.43	10.54	10.47		14.24	14.27	17.24	11.88	10.30	10.26	10.66	30
31	10.84		10.51	10.78		13.83		17.01		10.32	10.30		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2-10-63	1520	17.8	4-26-63	2400	15.3	5-28-63	0530	18.6			
2-14-63	0430	17.8	5-10-63	1430	19.6	6- 4-63	0320	17.8			
3- 1-63	0910	15.0	5-26-63	0415	18.9	6-18-63	0200	17.4			

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 25 28	120 39 47	SW 9 6S 12E	34400	22.67	12- 4-50	JUL 41-DEC 41 JUL 42-DATE	APR 41- DATE	1950		96.24	USCGS

Station located 150 ft. below McSwain Bridge, immediately N of Cressey. Prior to May 20, 1960, station located 250 ft. upstream.

TABLE B-67

DAILY MEAN GAGE HEIGHT

MERCED RIVER NEAR LIVINGSTON

IN FEET

STATION NO	WATER YEAR
805138	1963

DAY	OCT.	NOV.	DEC.	JAN.	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	1.59	1.14	1.11	1.25E	1.90	7.42	05.52	6.37	11.11	3.19	1.50	1.66	1
2	1.57	1.11	1.12	1.24E	3.67	7.24	05.39	5.89	11.34	2.57	1.47	1.57	2
3	1.57	1.10	1.11	1.22	2.56	4.55	05.50	5.79	11.42	2.47	1.63	1.30	3
4	1.59	1.15	1.08	1.22	2.00	3.23	05.64	5.64	12.02	2.51	1.82	1.29	4
5	1.41	1.13	1.10	1.25E	1.77	2.83	05.54	5.55	10.54	2.60	1.69	1.39	5
6	1.34	1.13	1.12	1.25E	1.60	2.55	05.58	5.21	8.80	2.61	1.62	1.49	6
7	1.31	1.12	1.12	1.25E	3.50	2.45	06.06	4.53	8.81	2.32	1.47	1.53	7
8	1.28	1.09	1.11	1.25E	4.28	2.30	06.17	5.17	7.83	2.23	1.58	1.42	8
9	1.25	1.06	1.17	1.24E	6.54	2.20	05.89	7.20	6.60	2.08	1.44	1.39	9
10	1.26	1.07	1.22	1.24E	8.45	2.15	05.66	12.62	7.67	1.77	1.58	1.25	10
11	1.26	1.12	1.19	1.24E	8.54	2.24	05.10	13.89	6.12	1.65	1.56	1.30	11
12	1.26	1.07	1.18	1.24E	7.62	2.29	05.02	13.16	4.30	1.60	1.62	1.22	12
13	1.26	1.03	1.17	1.24E	8.30	2.11	05.00	11.89	3.77	1.56	1.44	1.49	13
14	1.29	1.04	1.16	1.23E	10.13	2.05	05.07	8.99	3.45	1.55	1.39	1.61	14
15	1.28	1.07	1.22E	1.23E	8.12	2.07	05.44	7.87	3.33	1.61	1.34	1.54	15
16	1.28	1.07	1.32E	1.23E	7.74	2.35	05.60	7.50	3.27	1.62	1.23	1.51	16
17	1.25	1.08	1.44E	1.23E	7.61	2.51	05.50	7.79	5.95	1.53	1.31	1.55	17
18	1.21	1.13	1.52E	1.24	7.56	2.12	05.21	11.02	10.77	1.43	1.56	1.77	18
19	1.23	1.07	1.48	1.25	7.53	2.08	05.69	12.40	10.91	1.44	1.59	1.77	19
20	1.23	1.07	1.39	1.26	7.49	2.05	06.11	12.85	10.39	1.38	1.56	1.87	20
21	1.21	1.07	1.39E	1.26	7.52	2.10	06.37	13.15	9.45	1.65	1.34	1.89	21
22	1.18	1.13	1.38E	1.26	7.52	2.02	06.67	13.25	8.97	1.58	1.25	1.83	22
23	1.18	1.07	1.37E	1.25	7.49	2.07	06.09	13.46	7.34	1.54	1.29	1.70	23
24	1.18	1.04	1.36E	1.24	7.48	1.94	06.09	13.57	6.34	1.51	1.21	1.70	24
25	1.19	1.11	1.35E	1.23	7.46	1.88	07.00	12.92	5.78	1.50	1.57	1.70	25
26	1.20	1.12	1.34E	1.19	7.47	1.85	07.54	11.02	4.69	1.57	1.68	1.60	26
27	1.20	1.09	1.33E	1.37	7.46	1.87	07.95	11.52	3.79	1.61	1.50	1.48	27
28	1.20	1.09	1.32E	1.33	7.44	2.22	07.69	13.05	3.80	1.60	1.49	1.43	28
29	1.17	1.10	1.31E	1.28		3.18	07.27	12.92	4.12	1.67	1.40	1.58	29
30	1.15	1.10	1.31E	1.25		5.96	06.67	11.52	3.97	1.48	1.23	1.76	30
31	1.17		1.30E	1.34		5.81		11.25		1.48	1.43		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2-10-63	2110	10.2	4-28-63	0800	8.0	5-29-63	0550	13.3			
2-14-63	0945	11.1	5-10-63	2400	14.3	6- 4-63	1020	12.2			
4-21-63	2100	7.3	5-24-63	0630	13.7	6-18-63	0850	11.2			

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37 23 18	120 47 35	NW29 6S 11E	11100	21.44	2-12-38	MAR 22-SEP 24 OCT 25-FEB 44	JAN 51-JAN 60 APR 62-DATE	1962	DATE	79.5	USGS

Station located 4.5 mi. W of Livingston and 9.5 mi. upstream from mouth. Early discharge records, 1922-44, available in U.S.G.S. Water Supply Papers. Stage records from 1951-1960 were not published, available from D.W.R., State of California. Station reactivated April 1, 1962 for stage only. Drainage area, 1,259 sq. mi.

TABLE B-68

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER NEAR NEWMAN

IN FEET

STATION NO	WATER YEAR
B07300	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	48.88	48.78	NR	49.20	51.50	53.58	53.38	54.33	55.67	50.77	NR	49.32	1
2	48.90	48.77	NR	49.20	51.67	53.50	53.21	53.75	55.72	50.41	NR	49.44	2
3	48.93	48.72	NR	49.22	52.92	52.77	53.08	53.26	55.79	50.31	NR	49.38	3
4	48.91	46.65	NR	49.20	54.00	51.46	52.94	52.98	55.93	50.32	NR	49.39	4
5	48.82	48.68	48.58	49.18	54.31	50.95	52.61	52.74	55.91	50.39	NR	49.42	5
6	48.80	48.70	48.52	49.18	53.73	50.67	52.43	52.54	54.73	50.42	NR	49.44	6
7	48.87	48.73	48.49	49.38	52.86	50.46	52.83	52.13	54.22	50.39	NR	49.59	7
8	48.72	48.77	48.47	49.71	52.96	50.31	53.20	51.81	53.96	50.26	49.42	49.49	8
9	48.73	48.73	48.47	49.95	52.88	50.20	53.15	52.65	53.27	50.16	49.36	49.49	9
10	48.67	48.78	48.48	49.99	54.13	50.16	52.93	54.33	53.03	50.02	49.48	49.32	10
11	48.60	48.82	48.48	49.97	55.50	50.14	52.81	56.72	53.33	49.84	49.63	49.31	11
12	48.63	48.86	48.71	49.89	55.53	50.17	52.94	57.02	51.89	49.78	49.58	49.31	12
13	48.68	NR	48.77	49.77	55.91	50.03	52.91	56.86	51.37	49.68	49.66	49.43	13
14	48.78	NR	48.72	49.75	56.80	49.81	52.84	55.68	51.21	49.59	49.50	49.62	14
15	48.79	NR	48.67	49.72	56.96	49.87	52.84	54.22	51.16	49.58	49.42	49.68	15
16	48.75	NR	48.77	49.64	56.84	50.08	53.01	53.73	51.13	49.60	49.37	49.76	16
17	48.60	NR	49.08	49.55	56.67	50.17	53.29	53.44	51.20	49.54	49.33	49.71	17
18	48.48	NR	49.35	49.45	56.15	50.07	53.58	54.36	54.07	49.42	49.26	49.75	18
19	48.45	NR	49.56	49.37	55.60	50.02	53.81	55.82	55.01	49.39	49.38	49.73	19
20	48.40	NR	49.65	49.33	55.14	50.01	53.85	56.32	55.25	49.38	49.33	49.78	20
21	48.39	NR	49.64	49.31	54.81	49.89	53.82	56.60	54.65	49.42	49.34	49.93	21
22	48.40	NR	49.58	49.30	54.59	49.92	54.16	56.79	54.35	49.55	49.27	50.01	22
23	48.49	NR	49.52	49.25	54.34	50.07	54.34	56.89	53.65	49.42	49.18	50.02	23
24	48.53	NR	49.44	49.22	54.13	50.12	54.64	57.02	52.87	49.28	49.23	49.88	24
25	48.58	NR	49.39	49.19	54.00	50.19	54.96	56.99	52.33	49.32	49.39	49.83	25
26	48.70	NR	49.32	49.18	53.26	50.21	55.14	56.20	51.87	49.34	49.61	49.77	26
27	48.79	NR	49.29	49.15	53.75	50.18	55.22	55.61	51.17	49.43	49.49	49.63	27
28	48.86	NR	49.18	49.19	53.65	50.30	55.21	56.27	50.83	NR	49.58	49.58	28
29	48.84	NR	49.16	49.22		50.58	55.04	56.85	50.90	NR	49.50	49.46	29
30	48.84	NR	49.13	49.31		52.27	54.73	56.38	51.01	NR	49.35	49.54	30
31	48.82		49.14	49.65		53.54		55.91		NR	49.36		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 5-63	0600	54.38	3-31-63	1400	53.62	5-24-64	1400	57.05			
2-11-63	1000	55.68	4-27-63	1200	55.25						
2-14-63	2100	57.17	5-12-63	2000	57.04						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 21 02	120 58 34	SW 3 7S 9E	33000	18.50	3- 7-38	APR 12-DATE	APR 12-DATE	1912	1959	47.24	USCGS
										47.31	USCGS
								1959		0.00	USCGS

Station located at bridge on Hills Ferry Road, 300 ft. below the Merced River, 3.5 mi. NE of Newman. Records furn. by U.S.G.S. Drainage area is 9,990 sq. mi. Flow records are published in the U.S.G.S. report, "Surface Water Records of California."

TABLE B-69

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER AT CROWS LANDING BRIDGE

IN FEET

STATION NO	WATER YEAR
807250	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	38.80	38.53	38.34	38.82	43.51	43.45	43.40	44.64	45.95	40.70	39.15	38.91	1
2	38.78	38.47	38.33	38.82	42.06	43.37	43.17	44.03	45.85	40.32	39.04	39.11	2
3	38.77	38.44	38.32	38.83	42.42	43.03	43.14	43.38	45.92	40.16	38.97	39.03	3
4	38.77	38.36	38.29	38.86	43.32	41.77	43.05	43.01	45.97	40.10	39.04	38.97	4
5	38.78	38.34	38.24	38.82	43.92	41.06	42.69	42.72	46.19	40.25	39.33	39.06	5
6	38.68	38.36	38.20	38.83	43.67	40.71	42.45	42.57	45.29	40.17	39.30	39.12	6
7	38.66	38.37	38.15	38.91	42.93	40.44	43.03	42.22	44.40	40.26	39.17	39.27	7
8	38.60	38.39	38.13	39.24	42.73	40.23	43.39	41.79	44.09	40.16	39.07	39.27	8
9	38.46	38.42	38.12	39.52	42.58	40.08	43.34	42.23	43.52	39.99	39.07	39.33	9
10	38.44	38.42	38.12	39.64	43.57	39.99	43.10	43.26	43.05	39.76	39.12	39.13	10
11	38.37	38.46	38.12	39.65	44.95	39.98	42.97	45.91	43.45	39.59	39.35	38.96	11
12	38.53	38.51	38.21	39.57	45.31	39.96	43.04	46.99	42.40	39.49	39.30	38.99	12
13	38.64	38.50	38.42	39.47	45.98	39.86	43.06	47.13	41.59	39.42	39.31	39.08	13
14	38.62	38.52	38.38	39.43	47.00	39.63	43.07	46.40	41.23	39.39	39.25	39.27	14
15	38.75	38.55	38.35	39.41	47.39	39.56	42.96	44.72	41.05	39.40	39.18	39.34	15
16	38.74	38.54	38.42	39.35	47.19	39.85	43.06	43.87	41.00	39.40	39.11	39.40	16
17	38.48	38.54	38.63	39.24	47.02	40.15	43.32	43.48	40.90	39.36	39.17	39.36	17
18	38.31	38.57	38.90	39.15	46.48	39.95	43.61	43.84	42.86	39.24	39.08	39.37	18
19	38.22	38.53	39.13	39.05	45.84	39.78	43.83	45.31	44.57	39.09	39.17	39.42	19
20	38.17	38.49	39.27	38.97	45.27	39.77	44.00	46.10	45.01	39.04	39.01	39.44	20
21	38.14	38.49	39.30	38.94	44.87	39.72	44.10	46.53	44.71	39.10	39.01	39.60	21
22	38.13	38.44	39.24	38.92	44.60	39.77	44.28	46.89	44.28	39.25	39.00	39.66	22
23	38.18	38.41	39.20	38.90	44.33	40.01	44.51	47.07	43.84	39.14	38.91	39.70	23
24	38.23	38.40	39.14	38.86	44.09	40.07	44.73	47.23	43.06	38.98	38.86	39.57	24
25	38.27	38.38	39.06	38.82	43.92	40.19	44.96	47.37	42.43	39.05	39.00	39.46	25
26	38.36	38.39	38.99	38.79	43.80	40.14	45.31	46.97	41.96	39.05	39.13	39.43	26
27	38.45	38.40	38.93	38.76	43.67	40.08	45.41	45.99	41.26	39.04	39.14	39.29	27
28	38.56	38.36	38.86	38.76	43.54	40.29	45.46	46.19	40.74	39.01	39.12	39.26	28
29	38.59	38.37	38.82	38.79		40.77	45.34	46.99	40.74	39.09	39.18	39.11	29
30	38.60	38.34	38.79	38.88		41.59	45.10	46.95	40.84	39.12	39.02	39.11	30
31	38.59		38.79	39.46		43.13		46.27		39.21	38.99		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 1-63	0015	44.3	4- 1-63	0300	43.5	5-25-63	1230	47.4	6- 5-63	1250	46.3
2- 5-63	1240	44.1	4- 8-63	0840	43.5	5-13-63	0850	47.3	6-20-63	1310	45.2
2-15-63	0610	47.5	4-28-63	0430	45.5	5-30-63	0050	47.2			

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37 26 52	121 00 44	NW 8 6S 9E		61.9	4- 7-58		41-DATE		1959	0.00	USED
								1959		0.00	USGS
								1959		3.51	USED

Station located at Crows Landing Road Bridge, 4.3 mi. NE of Crows Landing.

TABLE B-70

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER AT PATTERSON BRIDGE

IN FEET

STATION NO	WATER YEAR
B07200	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	32.85	32.30	32.02	32.42	36.27	37.16	37.14	38.69	39.83	34.38	32.54	32.78	1
2	32.79	32.25	32.00	32.42	36.02	37.07	36.95	38.09	39.66	34.04	32.51	32.83	2
3	32.79	32.22	31.98	32.43	35.78	36.84	36.96	37.40	39.67	33.86	32.46	32.78	3
4	32.87	32.16	31.99	32.44	36.67	35.79	36.89	36.91	39.67	33.83	32.54	32.66	4
5	32.82	32.12	31.97	32.42	37.52	34.93	36.51	36.63	39.83	33.90	32.81	32.86	5
6	32.76	32.14	31.94	32.41	37.55	34.48	36.24	36.43	39.35	33.80	32.82	32.86	6
7	32.68	32.15	31.85	32.44	36.89	34.20	36.76	36.14	38.33	33.88	32.70	32.99	7
8	32.65	32.15	31.79	32.69	36.34	33.93	37.28	35.65	37.91	33.98	32.63	33.02	8
9	32.51	32.17	31.74	32.98	36.23	33.77	37.28	35.75	37.47	33.66	32.62	33.10	9
10	32.47	32.18	31.76	33.15	36.98	33.65	37.11	36.55	36.89	33.42	32.70	33.07	10
11	32.49	32.22	31.81	33.17	38.31	33.64	36.92	38.81	37.15	33.21	33.00	32.87	11
12	32.63	32.21	31.82	33.15	39.06	33.51	36.93	40.35	36.53	33.14	32.90	32.79	12
13	32.80	32.25	32.05	33.05	39.48	33.29	36.99	40.75	35.49	33.03	32.80	33.04	13
14	32.72	32.25	32.05	33.00	40.58	33.01	37.00	40.39	34.93	33.06	32.86	33.10	14
15	32.91	32.28	32.02	32.98	41.17	32.84	36.91	38.90	34.69	33.01	32.80	33.18	15
16	33.06	32.27	32.07	32.94	41.07	33.14	36.98	37.67	34.68	32.93	32.69	33.23	16
17	32.58	32.27	32.19	32.86	40.89	33.71	37.17	37.13	34.51	32.97	32.62	33.11	17
18	32.34	32.28	32.43	32.76	40.55	33.58	37.43	37.13	35.41	32.90	32.60	33.06	18
19	32.21	32.26	32.65	32.66	39.93	33.40	37.69	38.45	37.66	32.82	32.59	33.19	19
20	32.14	32.26	32.83	32.57	39.32	33.37	37.91	39.42	38.32	32.76	32.53	33.18	20
21	32.07	32.24	32.89	32.55	38.82	33.29	38.07	39.94	38.33	32.69	32.43	33.28	21
22	32.04	32.22	32.88	32.54	38.51	33.31	38.17	40.31	37.93	32.85	32.55	33.45	22
23	32.03	32.15	32.83	32.53	38.22	33.65	38.41	40.57	37.62	32.84	32.53	33.47	23
24	32.05	32.11	32.78	32.49	37.95	33.78	38.61	40.75	36.89	32.70	32.45	33.45	24
25	32.09	32.13	32.70	32.45	37.73	33.83	38.83	40.89	36.14	32.50	32.53	33.28	25
26	32.11	32.11	32.65	32.42	37.56	33.84	39.15	40.81	35.52	32.47	32.70	33.18	26
27	32.19	32.11	32.59	32.38	37.42	33.78	39.31	40.03	34.92	32.43	32.63	33.09	27
28	32.30	32.07	32.51	32.37	37.27	34.02	39.40	39.77	34.36	32.53	32.60	32.96	28
29	32.32	32.03	32.46	32.39		34.41	39.31	40.42	34.30	32.63	32.78	32.98	29
30	32.33	32.03	32.43	32.48		35.09	39.12	40.69	34.45	32.56	32.73	33.01	30
31	32.33		32.42	32.79		36.53		40.21		32.53	32.74		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 1-63	1750	37.5	4- 1-63	2130	37.2	5-25-63	1620	41.0	6- 5-63	1610	39.9
2- 6-63	0000	37.7	4-27-63	1130	39.5	5-30-63	1245	40.8			
2-15-63	1500	41.2	5-13-63	1430	40.8	6- 1-63	0000	40.0			

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 29 52	121 04 52	SW15 5S 8E		54.0	6-13-38		APR 38-DATE	1938	1959	0.00	USED
								1959		0.00	USCGS
								1959		3.53	USED

Station located at Patterson-Turlock Highway Bridge, 3.1 mi. NE of Patterson

TABLE B-71

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER AT GRAYSON

IN FEET

STATION NO	WATER YEAR
B07080	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	DAY
1	24.42	23.78	23.66	23.84	26.89	28.82	30.17	31.14	32.93	26.13	24.08	24.37	1
2	24.28	23.71	23.62	23.84	28.05	28.63	29.19	30.35	32.72	25.83	24.02	24.30	2
3	24.28	23.68	23.51	23.83	29.56	28.42	28.51	29.39	32.62	25.58	24.03	24.26	3
4	24.42	23.63	23.49	23.90	31.00	27.53	28.47	28.76	32.53	25.45	24.06	24.05	4
5	24.33	23.57	23.51	23.88	31.73	26.62	28.15	28.40	32.26	25.46	24.37	24.24	5
6	24.36	23.59	23.50	23.83	31.98	26.14	27.76	28.14	31.58	25.42	24.47	24.25	6
7	24.25	23.59	23.48	23.82	31.43	25.83	28.10	27.88	30.47	25.45	24.25	24.37	7
8	24.30	23.61	23.48	23.94	29.27	25.58	28.77	27.40	29.82	25.65	24.22	24.43	8
9	24.08	23.63	23.40	24.24	28.77	25.43	29.40	27.23	29.44	25.40	24.29	24.51	9
10	24.02	23.63	23.29	24.43	29.24	25.32	29.82	27.79	29.02	25.08	24.38	24.60	10
11	24.13	23.65	23.29	24.46	30.48	25.23	29.96	29.58	29.01	24.87	24.53	24.32	11
12	24.20	23.65	23.39	24.47	31.21	24.98	30.63	31.70	29.41	24.73	24.53	24.18	12
13	24.40	23.72	23.52	24.46	31.24	24.79	30.85	32.55	27.82	24.67	24.36	24.39	13
14	24.37	23.72	23.60	24.38	32.48	24.51	29.69	32.41	26.78	24.62	24.37	24.55	14
15	24.40	23.73	23.54	24.37	33.93	24.33	29.36	31.21	26.38	24.60	24.31	24.62	15
16	24.67	23.72	23.59	24.36	33.41	24.48	30.72	29.83	26.33	24.45	24.17	25.11	16
17	24.30	23.71	23.60	24.29	32.83	25.07	30.44	29.12	26.21	24.46	24.06	25.27	17
18	23.98	23.72	23.72	24.18	32.48	25.03	29.44	28.72	26.36	24.45	24.03	25.22	18
19	23.84	23.70	24.05	24.07	32.02	24.81	29.68	29.66	28.82	24.26	24.04	25.32	19
20	23.75	23.69	24.25	24.01	31.63	24.73	30.11	30.92	29.76	24.21	24.01	25.37	20
21	23.65	23.69	24.35	23.97	30.82	24.64	30.72	31.57	30.68	24.28	23.88	25.44	21
22	23.63	23.68	24.45	23.96	30.38	24.62	30.85	31.93	30.87	24.48	24.04	25.66	22
23	23.59	23.62	24.42	23.96	30.12	24.93	30.85	32.27	30.15	24.46	24.08	25.68	23
24	23.63	23.56	24.30	23.92	29.78	25.14	30.95	32.50	29.12	24.17	24.12	25.58	24
25	23.53	23.58	24.18	23.90	29.45	25.19	31.04	32.56	28.30	24.01	24.16	25.47	25
26	23.57	23.60	24.14	23.87	29.27	25.23	31.33	33.05	27.65	24.00	24.19	25.40	26
27	23.63	23.62	24.03	23.85	29.14	25.20	31.54	32.71	27.88	23.94	24.09	24.73	27
28	23.73	23.60	23.99	23.81	28.97	25.51	31.60	32.27	27.17	23.98	24.03	24.50	28
29	23.77	23.55	23.93	23.80		25.99	31.28	32.76	26.05	24.08	24.26	24.57	29
30	23.77	23.60	23.89	23.86		27.96	31.18	33.36	26.14	24.07	24.28	24.53	30
31	23.79		23.85	24.21		29.40		33.24		24.05	24.31		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 1-63	1200	28.51	4- 1-63	1500	30.30	5-30-63	1900	33.48			
2- 6-63	1600	32.03	4-13-63	1100	30.97						
2-15-63	1300	34.10	5-13-63	1000	32.65						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 33 47	121 09 06	NW25 4S 7E	23900	45.15	3- 8-41	JUL 28-DATE	JUL 28-DATE		1959	0.00	USED
								1960		0.00	USCGS
								1960		3.81	USED

Station located at Laird Slough Bridge, 5 mi. above the Tuolumne River. High flows bypassing this station through old channel of San Joaquin River are included in figures shown. Records furn. by City of San Francisco.

TABLE B-72

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER AT WEST STANISLAUS I. D. INTAKE

IN FEET

STATION NO	WATER YEAR
B07070	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR.	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	19.93	20.48	22.37	21.08	22.27	25.01	28.79	28.35	30.64	22.73	18.75	19.60	1
2	19.77	20.43	22.08	21.17	25.43	24.43	26.50	27.16	30.47	22.59	18.76	19.68	2
3	19.74	20.38	21.55	21.21	29.16	24.06	25.14	25.98	30.30	22.07	18.64	19.69	3
4	19.86	20.36	21.43	21.88	30.54	23.45	24.76	25.40	30.07	21.09	18.86	19.61	4
5	19.89	20.26	21.91	21.63	31.06	22.65	24.26	25.10	29.05	21.00	19.15	19.66	5
6	19.86	20.11	22.10	21.20	31.22	22.44	23.37	24.86	27.56	20.75	19.16	19.72	6
7	19.86	20.15	22.41	20.90	30.52	22.13	23.36	24.37	26.50	20.77	19.01	19.89	7
8	19.88	20.32	22.58	20.92	27.62	21.73	25.07	23.50	25.80	21.65	18.93	19.97	8
9	19.66	20.36	22.28	21.49	27.16	21.58	27.38	23.35	25.72	21.16	18.99	19.92	9
10	19.55	20.40	21.76	21.52	27.57	21.43	28.18	23.73	25.98	21.45	19.35	19.95	10
11	19.62	20.41	21.87	21.44	28.80	21.16	28.75	24.89	26.22	21.49	19.67	19.63	11
12	19.85	20.39	22.38	21.67	28.76	20.81	29.77	27.63	27.59	21.29	19.73	19.47	12
13	20.64	20.39	22.25	21.55	28.02	20.51	29.44	28.68	25.11	21.41	19.48	19.66	13
14	21.04	20.45	22.14	21.17	30.00	19.88	27.48	28.22	22.61	20.88	19.42	19.89	14
15	21.07	20.51	21.87	20.92	31.85	19.60	27.45	27.25	22.30	20.62	19.43	20.03	15
16	21.15	20.55	21.75	20.85	30.34	19.86	29.79	26.73	22.96	20.30	19.29	20.55	16
17	20.87	20.58	21.48	20.87	29.19	20.44	28.61	26.06	22.73	20.18	19.18	20.90	17
18	20.59	20.52	21.44	20.85	28.74	20.39	26.65	25.16	21.94	19.99	19.31	20.87	18
19	20.41	20.48	22.20	20.78	28.72	20.16	26.94	25.38	23.62	19.61	19.33	21.02	19
20	20.35	20.47	22.32	20.75	28.71	20.02	27.73	26.33	26.09	19.33	19.28	21.01	20
21	20.27	20.57	22.48	20.62	27.42	19.94	28.73	26.97	28.47	19.41	19.07	21.04	21
22	20.20	20.52	22.77	20.51	27.03	19.94	28.76	27.27	28.88	19.45	19.27	21.22	22
23	19.99	20.48	22.69	20.64	26.73	20.21	28.47	27.67	27.47	19.37	19.46	21.30	23
24	20.00	20.44	22.22	20.60	26.17	20.44	28.48	28.13	26.02	18.77	19.49	21.18	24
25	20.19	21.08	21.98	20.60	25.48	20.39	28.42	29.07	24.71	18.38	19.64	21.12	25
26	20.27	21.12	21.91	20.63	25.35	20.38	28.55	29.59	23.31	18.81	19.70	20.97	26
27	20.36	21.23	21.68	20.61	25.56	20.41	28.76	29.68	22.56	18.73	19.40	20.18	27
28	20.44	21.78	22.01	20.43	25.33	20.76	28.42	29.46	21.87	18.87	19.12	19.90	28
29	20.48	21.92	21.73	20.31		23.28	27.44	29.92	21.74	18.98	19.23	19.97	29
30	20.45	22.22	21.62	20.62		27.43	27.97	30.72	22.61	18.85	19.34	19.95	30
31	20.46		21.40	20.93		28.43		30.81		18.44	19.45		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 6-63	1400	31.3	4-13-63	0410	30.1	5-31-63	0720	30.8			
2-15-63	0410	32.2	4-16-63	1530	30.1	6- 1-63	0000	30.7			
4- 1-63	1240	29.2	5-26-63	2400	29.8	6-22-63	1310	29.0			

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 36 07	121 10 51	SE10 4S 7E					DEC 50-DATE		1959	0.00	USED
								1959		0.00	USCGS
								1959		3.67	USED

Station located at intake gates for W.S.I.D. Canal, 2.6 mi. N of Grayson.

TABLE B-73

DAILY MEAN GAGE HEIGHT

TUOLUMNE RIVER AT LAGRANGE BRIDGE

IN FEET

STATION NO	WATER YEAR
804175	1963

DAY	OCT	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	67.55	69.19	70.23	69.25	71.70	69.14	70.24	71.10	73.38	70.59	67.35	67.38	1
2	67.57	69.17	69.91	70.31	75.09	68.99	70.14	70.52	73.40	68.25	67.35	67.31	2
3	67.24	69.15	70.56	70.18	75.10	68.98	69.90	70.46	73.17	67.98	67.35	67.30	3
4	67.24	68.88	70.68	69.59	75.11	69.19	68.61	70.48	71.64	67.83	67.35	67.39	4
5	67.22	68.95	70.90	69.26	75.02	69.31	67.34	70.33	70.26	67.85	67.35	67.18	5
6	67.22	69.25	71.11	69.06	74.26	69.08	67.65	69.93	70.24	68.79	67.35	67.20	6
7	67.21	69.23	71.09	69.77	71.57	69.10	70.50	68.73	70.25	69.45	67.35	67.19	7
8	67.21	69.26	70.52	69.75	72.54	69.11	72.84	68.61	70.92	68.60	67.35	67.21	8
9	67.33	69.30	70.25	69.47	72.75	69.08	72.67	68.61	71.53	70.23	67.34	67.27	9
10	68.62	69.26	71.06	69.79	72.57	68.74	73.69	69.18	72.10	69.29	67.34	67.11	10
11	69.23	69.21	70.80	69.85	71.49	68.96	74.24	71.46	73.32	70.10	67.38	67.18	11
12	69.28	69.29	70.57	69.26	70.89	67.69	72.62	70.65	68.99	69.59	67.38	67.33	12
13	69.24	69.41	70.20	68.91	72.90	67.38	70.91	69.70	68.38	68.46	67.38	67.32	13
14	69.04	69.36	70.08	68.91	73.36	67.36	72.50	70.65	69.74	68.56	67.39	67.29	14
15	68.75	69.45	69.74	68.95	71.46	67.27	74.38	71.80	70.22	68.36	67.40	67.28	15
16	69.19	69.34	69.31	69.11	71.13	67.32	71.42	71.35	69.18	68.42	67.41	67.27	16
17	69.17	69.30	70.34	69.12	71.08	67.31	70.34	70.70	68.36	67.58	67.41	67.25	17
18	69.14	69.24	70.40	69.14	72.11	67.30	71.76	70.51	69.13	67.36	67.42	67.26	18
19	69.18	69.48	70.42	69.02	71.54	67.26	72.36	70.56	72.20	67.35	67.54	67.30	19
20	69.16	69.33	70.72	68.79	71.06	67.26	72.46	70.25	73.81	67.33	67.39	67.30	20
21	68.78	69.34	70.85	68.88	71.27	67.28	72.09	70.10	73.60	67.32	67.39	67.34	21
22	68.73	69.25	70.41	69.11	71.09	67.27	72.03	70.10	71.27	67.31	67.39	67.33	22
23	69.22	70.05	69.96	68.80	70.37	67.25	72.01	70.55	71.13	67.32	67.38	67.42	23
24	69.16	70.10	70.25	69.12	69.82	67.29	72.02	71.64	69.45	67.31	67.61	67.44	24
25	69.22	69.70	69.71	69.11	70.40	67.30	72.06	72.19	68.72	67.31	67.30	67.43	25
26	69.24	70.60	70.51	69.06	70.74	67.33	72.19	72.20	68.51	67.31	67.25	67.43	26
27	69.24	70.61	70.06	68.34	70.40	68.37	70.97	72.52	68.50	67.33	67.27	67.41	27
28	69.16	70.76	70.06	68.72	69.77	72.30	70.21	73.15	69.41	67.32	67.39	67.39	28
29	69.11	71.00	69.87	69.12		74.27	72.35	73.44	70.25	67.32	67.33	67.29	29
30	69.25	70.92	69.21	68.98		73.79	72.00	73.41	70.05	67.31	67.33	67.25	30
31	69.25		69.72	68.99		73.80		73.39		67.33	67.33		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 3-63	1030	75.3	2-18-63	2250	74.4	4-15-63	0850	75.0			
2- 9-63	1650	73.4	3-29-63	1930	74.7	4-10-63	1430	74.5			
2-14-63	2000	75.0	3-30-63	2310	74.5	4-19-63	2330	74.3			

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
			OF RECORD					PERIOD			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	FROM	TO	ZERO ON GAGE	REF DATUM
37 39 59	120 27 40	NW20 3S 14E	48200	88.0	12- 8-50	OCT 36-DATE	OCT 36-SEP 60 OCT 61-Date	1937		0.00	USGS

Station located at highway bridge, immediately N of La Grange. Flow regulated by reservoirs and power plants. In order to machine process this station, the recorder datum was changed. To obtain true elevations add 100 feet to all of the above gage heights.

TABLE B-74

DAILY MEAN GAGE HEIGHT

TUOLUMNE RIVER AT ROBERTS FERRY BRIDGE

IN FEET

STATION NO	WATER YEAR
804165	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	8.28	9.92	11.02	10.06	11.16	9.94	11.33	11.69	13.74	10.60	8.26	8.38	1
2	8.41	9.90	10.71	10.60	15.72	9.82	10.70	10.95	13.78	9.93	8.25	8.40	2
3	8.52	9.90	10.91	10.92	15.92	9.74	10.46	10.89	13.67	8.90	8.23	8.37	3
4	8.37	9.78	11.27	10.45	15.84	9.73	10.07	10.87	12.52	8.74	8.23	8.37	4
5	8.32	9.58	11.45	10.15	15.81	10.04	8.68	10.76	10.80	8.72	8.27	8.41	5
6	8.33	9.88	11.73	9.97	15.55	9.92	8.54	10.38	10.75	9.00	8.25	8.43	6
7	8.32	9.88	11.75	10.08	12.14	9.77	10.23	9.44	10.73	10.31	8.24	8.40	7
8	8.30	9.88	11.27	10.51	13.03	9.78	12.83	9.42	11.11	9.10	8.24	8.41	8
9	8.30	9.92	10.99	10.23	13.26	9.77	13.21	9.40	11.87	10.51	8.26	8.41	9
10	8.62	9.93	11.42	10.34	13.15	9.55	13.93	9.36	12.03	10.24	8.28	8.40	10
11	9.81	9.89	11.51	10.58	12.32	9.55	14.83	11.57	14.03	10.28	8.30	8.44	11
12	10.04	9.87	11.26	10.16	11.42	9.07	13.88	11.25	10.58	10.31	8.29	8.47	12
13	9.97	10.00	11.04	9.93	12.77	8.49	11.11	10.38	9.30	9.58	8.25	8.51	13
14	9.88	10.09	10.86	9.65	14.41	8.37	12.16	10.62	9.99	9.36	8.26	8.55	14
15	9.64	10.09	10.52	9.68	12.11	8.33	15.05	11.95	10.66	9.19	8.30	8.55	15
16	9.89	10.03	10.30	9.83	11.51	8.32	12.61	11.79	10.23	9.22	8.29	8.53	16
17	9.91	10.01	10.65	9.82	11.54	8.31	10.71	11.15	9.24	8.87	8.28	8.51	17
18	9.88	9.95	11.14	9.85	11.96	8.30	12.04	10.86	9.44	8.43	8.30	8.54	18
19	9.92	10.00	11.09	9.84	12.67	8.27	12.38	10.90	11.75	8.29	8.30	8.58	19
20	9.92	10.03	11.32	9.65	11.45	8.25	12.86	10.74	14.28	8.26	8.31	8.58	20
21	9.68	10.01	11.46	9.58	11.68	8.25	12.74	10.55	14.26	8.24	8.28	8.59	21
22	9.56	10.00	11.21	9.83	11.59	8.26	12.32	10.53	12.11	8.25	8.33	8.61	22
23	9.95	10.17	10.78	9.63	11.08	8.28	12.38	10.55	11.49	8.24	8.35	8.61	23
24	9.89	10.84	10.88	9.81	10.48	8.26	12.36	12.05	10.52	8.26	8.34	8.60	24
25	9.93	10.55	10.59	9.83	10.74	8.26	12.40	12.23	9.55	8.26	8.56	8.65	25
26	9.97	10.92	10.76	9.82	11.26	8.26	12.52	12.51	9.46	8.26	8.38	8.67	26
27	9.96	11.26	10.92	9.30	11.00	8.53	11.91	12.73	9.30	8.26	9.31	8.69	27
28	9.91	11.35	10.70	9.49	10.76	11.56	10.74	13.31	9.65	8.25	8.32	8.68	28
29	9.86	11.64	10.54	9.83		14.70	12.01	13.82	10.66	8.25	8.36	8.69	29
30	9.95	11.61	10.29	9.83		14.38	12.78	13.78	10.56	8.23	8.38	8.67	30
31	9.97		10.19	9.69		14.55		13.77		8.23	8.37		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 2-63	2400	16.0	3-30-63	0120	15.1	4- 9-63	0140	14.4	6-20-63	1200	14.4
2-14-63	0230	15.6	3-31-63	1820	14.8	4-11-63	0100	15.1			
2-19-63	0230	14.3	4-15-63	0140	15.3	6-11-63	1120	15.5			

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 38 08	120 37 03	NW35 3S 12E	49800	28.2	12- 8-50	JUL 28-OCT 36 JAN 37-FEB 38 JUN 38-DATE	JUL 28-OCT 36 JAN 37-FEB 38 JUN 38-DATE	1930 1940	1940	106.20 0.00	USCGS USCGS

Station located at highway bridge, 7.5 mi. E of Waterford. In order to machine process this station, the recorder datum was changed. To obtain true elevations add 100 feet to all of the above gage heights.

TABLE B-75

DAILY MEAN GAGE HEIGHT

TUOLUMNE RIVER AT HICKMAN BRIDGE

IN FEET

STATION NO	WATER YEAR
804150	1963

DAY	OCT	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	72.33	73.92	75.27	74.23	74.68	73.66	75.56	75.46	77.25	74.01	71.57	71.57	1
2	72.30	73.92	74.86	74.31	78.91	73.47	74.49	74.70	77.26	73.74	71.58	71.59	2
3	72.44	73.91	74.86	75.05	79.30	73.32	74.24	74.66	77.16	72.28	71.56	71.55	3
4	72.34	73.79	75.40	74.57	79.22	73.22	74.00	74.58	76.33	72.11	71.55	71.52	4
5	72.31	73.57	75.46	74.19	79.19	73.76	72.42	74.49	74.47	72.05	71.58	71.52	5
6	72.29	73.93	75.74	73.93	79.09	73.61	72.23	74.21	74.34	72.10	71.58	71.55	6
7	72.29	73.94	75.87	73.90	76.15	73.39	73.59	73.01	74.31	73.70	71.53	71.54	7
8	72.28	73.95	75.53	74.47	76.65	73.41	76.27	72.93	74.52	72.57	71.50	71.50	8
9	72.28	73.96	75.15	74.26	76.90	73.41	76.98	72.90	75.42	73.73	71.52	71.51	9
10	72.29	73.96	75.31	74.19	76.89	73.22	77.44	72.80	75.44	73.91	71.56	71.49	10
11	73.44	73.93	75.66	74.53	76.26	73.08	78.36	74.89	77.29	73.54	71.56	71.51	11
12	73.98	73.89	75.35	74.21	75.24	72.90	77.91	75.11	74.69	73.75	71.56	71.54	12
13	73.95	74.03	75.22	73.92	76.02	72.14	75.01	74.13	72.71	73.05	71.54	71.58	13
14	73.95	74.16	75.10	73.58	78.20	72.03	75.66	73.99	73.26	72.68	71.53	71.59	14
15	73.65	74.15	74.65	73.60	76.01	71.92	78.52	75.58	74.24	72.50	71.55	71.60	15
16	73.87	74.12	74.49	73.73	75.29	71.90	76.80	75.55	73.97	72.50	71.57	71.57	16
17	73.89	74.04	74.50	73.76	75.34	71.89	74.51	74.90	72.64	72.31	71.56	71.55	17
18	73.87	73.98	75.30	73.78	75.43	71.88	75.60	74.54	72.63	71.88	71.57	71.56	18
19	73.91	74.02	75.16	73.81	76.65	71.87	75.85	74.58	74.89	71.72	71.56	71.61	19
20	73.90	74.12	75.32	73.58	75.21	71.87	76.56	74.45	77.44	71.67	71.53	71.62	20
21	73.68	74.07	75.49	73.45	75.43	71.86	76.59	74.19	77.58	71.63	71.53	71.62	21
22	73.50	74.06	75.32	73.77	75.41	71.86	75.94	74.17	75.96	71.61	71.55	71.65	22
23	73.93	74.02	74.95	73.55	74.93	71.87	76.09	74.13	75.08	71.59	71.57	71.61	23
24	73.93	74.97	74.88	73.73	74.28	71.85	76.03	75.55	74.31	71.58	71.57	71.60	24
25	73.94	74.69	74.82	73.76	74.34	71.84	76.06	75.71	72.99	71.62	71.69	71.60	25
26	73.98	74.81	74.61	73.77	74.98	71.82	76.14	76.10	72.93	71.60	71.65	71.63	26
27	73.97	75.33	75.12	73.32	74.75	71.83	75.82	76.23	72.65	71.59	71.55	71.65	27
28	73.91	75.42	74.71	73.31	74.64	74.70	74.51	76.73	72.82	71.57	71.52	71.62	28
29	73.85	75.69	74.65	73.79		78.17	75.31	77.26	74.18	71.59	71.54	71.62	29
30	73.97	75.71	74.49	73.83		78.05	76.56	77.25	74.15	71.57	71.57	71.61	30
31	73.98		74.10	73.66		77.97		77.25		71.52	71.56		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 2-63	1950	79.4	2-19-63	0550	78.2	4- 9-63	1450	78.0	4-20-63	0210	77.7
2- 9-63	2215	77.5	3-30-63	0350	78.6	4-11-63	0340	78.6			
2-14-63	0630	79.0	3-31-63	2100	78.3	4-15-63	0430	78.7			

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 38 10	120 45 14	NW34 3S 11E	59000	96.2	12- 8-50	JUL 32-OCT 36 JAN 37-MAR 37 JUL 37-FEB 38 JUL 38-DEC 38 MAR 39-DATE	JUL 32-OCT 36 JAN 37-MAR 37 JUL 37-FEB 38 JUL 38-DEC 38 MAR 39-DATE	1932		0.00	USCGS

Station located at Hickman-Waterford Road Bridge, immediately SE of Waterford.

TABLE B-76

DAILY MEAN GAGE HEIGHT

DRY CREEK NEAR MODESTO

IN FEET

STATION NO	WATER YEAR
B04130	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	68.32	67.74	67.51	67.45	71.34	67.86	68.43	68.39	68.70	69.45	68.40	68.55	1
2	68.25	67.77	67.50	67.45	76.13	67.80	68.18	68.25	69.11	69.29	68.30	68.50	2
3	68.30	67.72	67.48	67.47	70.77	67.82	68.05	68.40	69.48	68.97	68.33	68.45	3
4	68.52	67.70	67.48	67.47	69.26	67.83	67.96	68.44	69.40	69.20	68.35	68.45	4
5	68.65	67.66	67.47	67.46	68.65	67.81	67.88	68.22	69.30	69.30	68.40	68.61	5
6	68.64	67.64	67.47	67.46	68.30	67.77	67.86E	68.31	69.22	68.66	68.51	68.66	6
7	68.68	67.62	67.47	67.47	68.07	67.71	67.96E	68.30	69.31	68.60	68.47	68.61	7
8	68.70	67.60	67.45	67.47	67.92	67.70	71.62E	68.14	69.01	68.67	68.50	68.65	8
9	68.54	67.61	67.44	67.46	67.90	67.77	70.42	68.38	68.73E	68.56	68.50	68.66	9
10	68.58	67.59	67.44	67.47	71.05	67.73	69.85	68.57	68.84E	68.72	68.52	68.58	10
11	68.59	67.62	67.44	67.47	73.85	67.75	69.42	68.56	68.84	68.60	68.41	68.46	11
12	68.68	67.60	67.44	67.45	69.98	67.74	69.22	68.72	68.71	68.49	68.54	68.58	12
13	69.47	67.58	67.43	67.44	71.64	67.74	69.07	68.69	68.64	68.49	68.36	68.59	13
14	69.43	67.55	67.44	67.44	77.94	67.74	69.01	68.64	68.65	68.47	68.36	68.55	14
15	69.22	67.59	67.46	67.45	71.78	67.71	71.44	68.68	68.78	68.80	68.33	68.67	15
16	69.10	67.59	67.66	67.45	69.92	67.72	72.04	68.72	69.11	68.78	68.42	68.66	16
17	68.24	67.55	68.08	67.44	69.26	67.79	70.43	68.73	68.93	68.63	68.36	68.72	17
18	68.04	67.55	68.15	67.44	68.93	67.81	69.49	68.96	68.97	68.58	68.35	68.93	18
19	67.93	67.55	67.83	67.44	68.71	67.74	69.03	68.77	68.95	68.60	68.30	68.94	19
20	67.80	67.55	67.66	67.45	68.52	67.71	73.21	68.61	68.66	68.53	68.29	68.73	20
21	67.73	67.55	67.59	67.49	68.37	67.70	72.06	68.60	68.58	68.61	68.33	68.67	21
22	67.66	67.52	67.53	67.49	68.27	67.73	71.92	68.63	68.63	68.62	68.43	68.68	22
23	67.63	67.50	67.49	67.48	68.16	68.14	70.43	68.98	68.92	68.53	68.29	68.64	23
24	67.65	67.48	67.47	67.45	68.10	68.01	69.79	68.78	69.39	68.42	68.26	68.65	24
25	67.67	67.47	67.46	67.45	68.04	67.82	69.49	68.64	69.53	68.33	68.35	68.69	25
26	67.69	67.46	67.46	67.44	67.98	67.77	69.32	69.10	69.44	68.34	68.44	68.61	26
27	67.73	67.50	67.46	67.44	67.93	67.81	69.51	68.98	69.38	68.41	68.61	68.43	27
28	67.76	67.50	67.46	67.46	67.91	68.06	69.77	68.90	69.35	68.47	68.59	68.41	28
29	67.75	67.51	67.45	67.52		70.37	69.26	68.92	69.29	68.52	68.50	68.48	29
30	67.71	67.51	67.45	67.51		69.73	68.62	68.87	69.29	68.47	68.48	68.54	30
31	67.63		67.47	67.55		68.85		68.74		68.34	68.45		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 2-63	0100	79.0	3-29-63	1340	71.7	4-22-63	0115	70.9			
2-10-63	2330	77.4	4-15-63	1150	73.5						
2-14-63	2130	79.7	4-20-63	1320	75.7						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 39 26	120 55 19	SE24 3S 9E	7710	88.04	12-23-55	MAR 41-DATE	MAR 41-DATE	1941		0.00	USCGS

Station located 0.1 mi. below Claus Road bridge, 4 mi. E. of Modesto. Tributary to Tuolumne River. Prior to Mar. 1941, records available for a site 2.5 mi. downstream. Station is operated under a cooperative agreement between the Department of Water Resources and the Modesto Irrigation District.

TABLE B-77

DAILY MEAN GAGE HEIGHT

TUOLUMNE RIVER AT MODESTO

IN FEET

STATION NO	WATER YEAR
B04120	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	41.34	41.89	43.13	42.10	42.17	42.26	45.95	44.12	46.53	42.32	41.29	41.29	1
2	41.34	41.87	42.41	41.94	47.50	41.95	42.59	43.02	46.62	42.54	41.29	41.32	2
3	41.32	41.85	42.22	42.45	50.57	41.89	42.38	42.67	46.67	41.78	41.27	41.30	3
4	41.37	41.85	42.56	42.42	50.51	41.84	42.26	42.61	46.10	41.66	41.30	41.27	4
5	41.38	41.78	42.64	42.14	50.41	41.98	41.87	42.60	43.45	41.62	41.28	41.27	5
6	41.35	41.74	42.95	41.98	50.36	41.99	41.54	42.49	42.57	41.53	41.28	41.29	6
7	41.38	41.88	43.11	41.88	47.58	41.89	41.76	42.08	42.52	41.84	41.27	41.32	7
8	41.38	41.91	43.11	42.13	44.63	41.87	43.51	41.80	42.50	42.04	41.28	41.33	8
9	41.32	41.91	42.59	42.18	45.32	41.88	45.83	41.80	43.15	41.86	41.30	41.34	9
10	41.35	41.92	42.37	42.05	46.10	41.86	45.94	41.80	43.48	42.37	41.28	41.32	10
11	41.37	41.93	43.08	42.16	46.49	41.73	47.96	42.22	45.20	42.13	41.31	41.33	11
12	41.86	41.91	42.85	42.21	43.74	41.78	48.61	43.30	45.06	42.32	41.29	41.33	12
13	42.11	41.91	42.76	41.98	43.60	41.50	44.80	42.59	42.02	42.11	41.24	41.39	13
14	42.19	41.96	42.48	41.82	49.50	41.34	43.22	42.19	41.79	41.82	41.25	41.35	14
15	42.13	41.95	42.38	41.78	46.80	41.29	47.17	43.01	42.29	41.80	41.25	41.37	15
16	42.08	41.97	42.27	41.80	43.67	41.28	48.67	43.77	42.41	41.71	41.31	41.39	16
17	42.05	41.93	42.06	41.85	43.23	41.27	43.71	43.06	41.99	41.66	41.26	41.34	17
18	42.02	41.92	42.54	41.85	43.09	41.29	42.99	42.61	41.73	41.53	41.27	41.38	18
19	42.00	41.90	42.57	41.86	45.02	41.27	43.82	42.57	42.22	41.41	41.28	41.38	19
20	42.01	41.96	42.51	41.84	43.48	41.26	46.15	42.56	45.18	41.36	41.25	41.36	20
21	41.96	41.94	42.76	41.75	43.16	41.25	46.17	42.39	47.13	41.35	41.26	41.36	21
22	41.83	41.94	42.95	41.77	43.30	41.24	44.89	42.33	46.17	41.35	41.28	41.36	22
23	41.78	41.92	42.54	41.84	42.99	41.28	44.72	42.35	43.40	41.35	41.30	41.34	23
24	41.93	42.30	42.26	41.77	42.48	41.28	44.57	42.90	43.11	41.30	41.28	41.33	24
25	41.93	42.43	42.41	41.85	42.28	41.25	44.52	43.47	42.16	41.30	41.34	41.34	25
26	41.90	42.26	42.14	41.85	42.57	41.23	44.63	44.32	41.97	41.32	41.36	41.34	26
27	41.85	42.89	42.52	41.83	42.67	41.27	44.82	44.35	41.86	41.30	41.31	41.34	27
28	41.85	42.89	42.31	41.63	42.55	41.55	43.09	44.97	41.79	41.31	41.28	41.34	28
29	41.86	43.05	42.28	41.73		45.89	42.69	46.23	42.17	41.34	41.26	41.33	29
30	41.84	43.26	42.20	41.87		48.26	45.28	46.58	42.43	41.35	41.31	41.36	30
31	41.88		41.96	41.86		47.41		46.53		41.30	41.27		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 2-63	2400	50.35	2- 5-63	1200	50.46	4- 6-63	0300	49.74			
2- 3-63	1000	50.68	2- 6-63	1300	50.40						
2- 4-63	1000	50.61	2-14-63	1800	51.21						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 37 38	120 59 20	SW33 3S 9E	57000	69.19	12- 9-50	JAN 95-DEC 96 MAR 40-DATE	78- 84 91- 97 MAR 40-DATE	1940		0.00	USCGS

Station located at U.S. Highway 99 Bridge. Records furn. by U.S.G.S. Flow records are published by the U.S.G.S. report, "Surface Water Records of California."

TABLE B-78

DAILY MEAN GAGE HEIGHT

TUOLUMNE RIVER AT TUOLUMNE CITY

IN FEET

STATION NO	WATER YEAR
804105	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	24.02	25.90	28.68	26.36	25.60	NR	32.90	30.90	33.17	27.28	24.30	24.19	1
2	23.93	25.87	29.92	26.36	30.17	NR	29.08	29.49	33.11	27.45	24.28	24.17	2
3	23.97	25.83	30.57	26.78	35.08	NR	27.88	28.45	33.11	26.49	24.23	24.11	3
4	24.01	25.78	30.50	27.53	35.56	NR	27.41	28.21	32.85	25.45	24.22	24.11	4
5	24.06	25.67	29.85	26.96	35.68	NR	26.78	28.08	31.07	25.37	24.21	24.05	5
6	24.09	25.40	29.57	26.38	35.72	NR	26.65	27.83	28.93	25.10	24.19	24.10	6
7	24.08	25.64	28.85	26.01	34.67	NR	25.40	27.21	28.33	25.18	24.21	24.15	7
8	24.10	25.82	29.00	26.10	30.95	NR	27.94	26.19	28.04	26.36	24.21	24.11	8
9	24.04	25.86	28.42	26.20	31.23	NR	31.17	26.04	28.50	25.52	24.27	24.17	9
10	24.00	25.87	27.83	25.48	31.72	NR	31.78	26.00	29.29	26.62	24.27	24.11	10
11	24.02	25.87	29.33	26.50	32.64	NR	32.97	26.33	30.11	26.56	24.28	24.06	11
12	24.60	25.84	28.66	26.81	31.04	NR	34.14	29.16	31.75	26.57	24.27	24.07	12
13	25.98	25.79	28.29	26.42	29.93	NR	32.70	29.60	27.86	26.58	24.19	24.11	13
14	26.51	25.89	27.89	25.92	33.62	NR	29.76	28.78	26.12	25.80	24.18	24.22	14
15	26.45	26.03	27.70	25.53	34.62	NR	31.22	28.58	26.65	25.59	24.18	24.19	15
16	26.29	26.08	27.50	25.46	31.68	NR	34.50	29.51	27.44	25.39	24.22	24.20	16
17	26.05	26.10	27.00	25.59	30.47	NR	31.48	29.10	26.94	25.24	24.12	24.12	17
18	25.98	25.99	27.15	25.62	30.08	NR	28.92	28.25	25.89	25.16	24.12	24.11	18
19	25.89	25.90	27.99	25.63	30.93	NR	29.96	28.00	26.12	24.76	24.13	24.19	19
20	25.87	25.91	27.91	25.63	30.71	24.19	31.17	28.21	29.47	24.59	24.11	24.21	20
21	25.87	26.07	28.14	25.43	29.48	24.17	32.16	28.22	32.52	24.52	24.11	24.25	21
22	25.68	26.02	28.46	25.28	29.46	24.19	31.66	28.22	36.66	24.48	24.12	24.24	22
23	25.40	25.98	28.17	25.57	29.18	24.21	31.14	28.45	30.12	24.47	24.17	24.19	23
24	25.53	26.10	27.55	25.40	28.37	24.25	31.01	28.89	29.14	24.39	24.18	24.11	24
25	25.80	27.21	27.47	25.50	27.58	24.20	30.90	30.28	27.71	24.31	24.22	24.15	25
26	25.83	27.00	27.18	25.57	27.87	24.15	29.99	31.03	26.48	24.32	24.27	24.14	26
27	25.90	27.40	27.27	25.57	NR	24.13	31.18	31.31	26.18	24.32	24.27	24.11	27
28	25.91	28.12	27.56	25.17	NR	24.48	30.24	31.46	25.92	24.32	24.15	24.12	28
29	35.85	28.30	27.24	25.06		24.83	28.90	32.31	26.26	24.48	24.16	24.13	29
30	25.76	28.70	27.06	25.54		33.21	30.53	33.14	27.34	24.36	24.20	24.10	30
31	25.83		26.68	25.72		33.12		33.21		24.32	24.19		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 6-63	1130	35.76	4-12-63	1400	34.30	7- 2-63	1450	28.03			
2-14-63	2350	36.15	4-16-63	0900	34.83						
4- 1-63	1000	33.51	6-22-63	0900	32.96						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 36 12	121 07 50	NW 7 4S 8E		46.65	12- 9-50	30-DATE	30-DATE		1959	0.00	USED
								1960		0.00	USCGS
								1960		3.50	USED

Station located at highway bridge, 3.35 mi. above mouth. Backwater at times affects the stage-discharge relationship. Records furn. by City of San Francisco.

TABLE B-79

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE

IN FEET

STATION NO	WATER YEAR
807040	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	15.07	15.67	17.39	16.37	16.67	19.86	23.79	23.44	26.63	18.22	14.42	14.81	1
2	15.01	15.62	17.23	16.41	19.50	19.31	22.39	22.48	26.36	17.90	14.42	14.85	2
3	14.97	15.57	16.68	16.25	24.22	18.90	20.82	21.40	25.85	17.59	14.39	14.84	3
4	15.07	15.55	16.46	17.04	26.21	18.43	20.31	21.32	25.46	16.63	14.44	14.76	4
5	15.16	15.48	16.84	16.80	26.27	17.70	19.83	21.29	24.40	16.47	14.59	14.80	5
6	15.17	15.33	17.02	16.37	26.19	17.48	18.79	21.27	22.85	16.22	14.64	14.83	6
7	15.19	15.32	16.63	16.06	25.65	17.17	18.66	21.04	21.67	16.11	14.53	14.92	7
8	15.15	15.48	16.44	15.95	23.44	16.78	20.85	20.97	21.01	16.85	14.55	15.09	8
9	14.85	15.54	16.60	16.47	22.58	16.62	23.08	21.18	21.11	16.66	14.57	15.08	9
10	14.72	15.57	17.11	16.61	22.82	16.44	24.23	21.67	21.42	16.65	14.69	15.12	10
11	14.78	15.60	17.23	16.46	24.07	16.20	24.14	22.69	21.62	16.93	14.89	14.87	11
12	15.03	15.60	16.62	16.68	24.49	15.86	25.48	24.64	22.93	16.57	15.01	14.79	12
13	15.76	15.59	16.73	16.66	23.81	15.75	26.18	25.67	21.52	16.67	14.75	14.94	13
14	16.28	15.61	16.80	16.27	24.68	15.15	24.50	25.17	18.96	16.27	14.62	15.17	14
15	16.37	15.69	17.09	15.98	26.55	14.87	23.03	23.79	17.95	16.03	14.61	15.26	15
16	16.43	15.75	16.92	15.88	25.61	14.97	24.73	22.63	19.21	15.79	14.58	15.56	16
17	16.20	15.79	16.65	15.88	24.54	15.57	24.84	21.66	19.75	15.66	14.55	15.99	17
18	15.86	15.75	16.46	15.88	24.06	16.09	23.19	20.79	19.08	15.54	14.59	15.97	18
19	15.67	15.70	17.18	15.82	23.82	15.67	22.50	21.15	20.41	15.30	14.55	16.04	19
20	15.58	15.65	17.37	15.79	23.87	15.23	22.88	22.72	21.36	15.06	14.53	16.06	20
21	15.50	15.76	17.55	15.66	22.77	15.07	23.97	23.62	23.35	15.02	14.36	16.10	21
22	15.45	15.75	17.82	15.53	22.13	14.98	24.66	24.17	24.03	15.08	14.45	16.25	22
23	15.24	15.72	17.88	15.60	21.79	15.13	24.63	24.63	23.07	14.98	14.64	16.40	23
24	15.18	15.64	17.52	15.61	21.36	15.34	24.58	24.93	21.43	14.78	14.65	16.29	24
25	15.38	16.15	17.22	15.57	20.74	15.60	24.21	25.56	20.16	14.52	14.77	16.24	25
26	15.48	16.33	17.16	15.61	20.43	15.54	24.12	26.01	18.80	14.50	14.89	16.11	26
27	15.55	16.31	16.75	15.61	20.41	15.38	24.24	26.21	18.06	14.46	14.72	15.58	27
28	15.64	16.84	17.12	15.47	20.16	15.74	24.05	25.89	17.37	14.52	14.53	15.18	28
29	15.67	16.99	16.82	15.27		17.90	23.06	25.82	17.15	14.59	14.60	15.19	29
30	15.64	17.25	16.84	15.53		22.59	22.99	26.40	17.98	14.52	14.66	15.22	30
31	15.64		16.74	15.84		23.46		26.69		14.41	14.74		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 4-63	1850	26.5	5-13-63	1230	25.8	6- 1-63	0000	26.68			
2-15-63	0900	26.7	5-27-63	1115	26.3						
4-13-63	1100	26.4	5-31-63	1440	26.7						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 38 28	121 13 37	SW29 3S 7E		39.8	12-9-50	JAN 50-MAR 52	SEP 43-DATE	1943	1959	0.00	USED
								1959		0.00	USCGS
								1959		3.41	USED

Station located at State Highway 132 Bridge, 13 mi. W of Modesto.

TABLE B-80

DAILY MEAN GAGE HEIGHT

STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE

IN FEET

STATION NO	WATER YEAR
B03175	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	01.40	02.16	01.79	01.94	07.27	01.39	05.37	04.17	08.11	01.91	01.41	01.49	1
2	01.36	01.85	01.79	01.91	14.05	01.37	04.94	04.62	07.15	01.67	01.39	01.46	2
3	01.37	02.13	01.79	01.90	08.92	01.36	04.90	06.98	06.06	01.61	01.38	01.42	3
4	01.40	02.14	01.79	01.90	07.41	01.35	04.18	07.35	04.38	01.60	01.44	01.45	4
5	01.46	02.15	01.79	01.90	06.92	01.33	02.00	07.64	03.60	01.58	01.39	01.56	5
6	01.44	02.15	01.80	01.90	05.46	01.81	03.83	08.29	02.40	01.58	01.43	01.52	6
7	01.39	02.14	01.81	01.89	05.39	01.83	08.66	10.10	03.63	01.58	01.39	01.56	7
8	01.37	02.07	01.80	01.89	05.66	01.41	09.00	10.26	05.00	01.54	01.41	01.61	8
9	01.35	02.06	01.81	01.90	05.59	01.33	07.81	11.44	05.05	01.48	01.46	01.55	9
10	01.36	02.02	01.82	01.90	08.35	01.66	06.86	12.34	05.47	01.46	01.45	01.57	10
11	01.41	02.02	01.84	01.89	07.74	03.08	12.27	12.08	06.16	01.42	01.42	01.75	11
12	01.49	02.07	01.83	01.88	07.07	02.89	10.91	10.85	05.77	01.42	01.38	01.78	12
13	02.07	02.06	01.85	01.84	06.95	02.79	06.23	08.72	03.97	01.42	01.36	01.78	13
14	02.05	02.08	01.84	01.84	06.78	02.57	05.72	07.15	03.73	01.39	01.41	01.77	14
15	01.99	02.13	01.91	01.75	06.67	02.45	06.80	05.61	06.99	01.40	01.45	01.77	15
16	01.98	02.12	02.03	01.71	06.63	03.67	08.17	04.55	07.34	01.41	01.48	01.76	16
17	01.84	02.07	02.01	01.70	06.54	05.05	06.94	04.75	07.73	01.39	01.45	01.77	17
18	01.89	02.12	02.47	01.70	05.98	02.89	05.43	07.25	08.26	01.41	01.41	01.88	18
19	01.93	02.13	03.01	01.71	05.21	01.81	05.57	10.22	05.73	01.43	01.43	01.87	19
20	01.89	02.17	03.03	01.64	04.75	01.55	06.74	10.66	05.95	01.44	01.41	01.84	20
21	01.78	02.13	02.95	01.63	03.86	01.52	08.90	11.15	06.03	01.40	01.45	01.84	21
22	01.77	02.12	03.04	01.56	03.87	01.52	08.76	11.19	05.34	01.39	01.45	01.85	22
23	02.06	02.13	03.06	01.49	03.87	02.38	08.02	11.18	02.40	01.38	01.43	01.88	23
24	02.07	02.13	02.82	01.39	03.87	04.06	06.89	11.11	02.11	01.39	01.44	01.87	24
25	02.09	02.13	02.00	01.38	03.29	02.72	06.88	11.07	02.10	01.45	01.47	01.87	25
26	02.12	02.14	01.94	01.38	01.79	01.75	06.89	10.32	01.90	01.41	01.50	01.87	26
27	02.10	02.09	01.94	01.37	01.52	01.54	06.30	09.32	01.89	01.42	01.45	01.87	27
28	02.10	01.91	02.95	01.38	01.41	07.99	05.42	09.49	02.57	01.41	01.42	01.87	28
29	02.08	01.84	03.27	01.38		06.98	05.10	10.00	02.89	01.39	01.46	01.86	29
30	02.08	01.79	03.08	01.42		05.65	04.42	09.78	02.61	01.43	01.44	01.86	30
31	02.10		02.75	01.60		05.46		09.43		01.37	01.46		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 2-63	0800	15.7	4-11-63	1630	12.5	5-22-63	1600	11.2			
3-28-63	1550	12.1	5- 6-63	2230	10.3						
4- 8-63	0400	11.8	5- 9-63	2140	12.5						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 47 18	120 45 41	SW 4 2S 11E	52000	30.05	11-21-50	JUN 28-DEC 39 APR 40-DATE	JUN 28-DEC 39 APR 40-DATE			0.00	LOCAL

Station located at bridge, 5.0 mi. E of Oakdale. Flow regulated by reservoirs and power plants.

TABLE B-81

DAILY MEAN GAGE HEIGHT

STANISLAUS RIVER AT RIVERBANK

IN FEET

STATION NO	WATER YEAR
803145	1963

DAY	OCT.	NOV.	DEC.	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	73.07	73.81	73.48	74.38	76.05	73.27	78.19	76.95	81.97	74.24	72.87	72.94	1
2	73.10	73.86	73.45	73.76	87.69	73.19	77.73	76.46	80.37	73.57	72.85	73.00	2
3	73.11	73.56	73.44	73.69	83.90	73.14	77.61	79.64	79.93	73.31	72.88	72.91	3
4	73.11	73.85	73.44	73.65	80.56	73.10	77.49	80.00	77.76	73.30	72.90	72.88	4
5	73.11	73.91	73.45	73.63	80.33	73.07	75.09	80.63	77.33	73.19	72.92	72.90	5
6	73.17	73.92	73.46	73.63	78.77	73.04	74.03	80.64	75.47	73.16	72.85	72.96	6
7	73.15	73.94	73.46	73.60	78.04	73.98	81.51	83.04	75.56	73.12	72.85	72.94	7
8	73.12	73.91	73.47	73.58	78.55	73.26	81.26	83.50	77.84	73.13	72.85	72.99	8
9	73.11	73.82	73.44	73.57	78.34	73.09	82.53	84.19	77.95	73.10	72.88	73.00	9
10	73.16	73.80	73.48	73.61	80.73	73.00	78.92	85.94	78.30	73.07	72.94	72.95	10
11	73.18	73.74	73.49	73.61	80.86	74.57	84.39	85.98	78.83	73.04E	72.93	72.99	11
12	73.38	73.76	73.50	73.57	80.45	75.17	85.55	85.10	79.17	73.00E	72.87	73.17	12
13	73.75	73.81	73.50	73.53	79.84	75.09	80.57	82.90	77.21E	72.96E	72.83	73.25	13
14	73.98	73.81	73.50	73.51	79.97	74.87	78.54	80.71	75.44E	72.93E	72.81	73.28	14
15	73.93	73.88	73.52	73.46	79.58	74.51	79.11	79.17	79.35	72.89E	72.85	73.20	15
16	73.76	73.99	73.81	73.35	79.50	74.76	81.36	77.87	80.63	72.89E	72.87	73.17	16
17	73.63	73.99	73.95	73.31	79.44	77.84	80.72	77.54	79.92	72.90	72.87	73.18	17
18	73.48	73.94	73.83	73.29	79.12	76.09	78.32	79.14	81.99	72.93	72.92	73.24	18
19	73.52	74.01	75.14	73.30	78.20	74.38	78.29	83.05	78.82	72.96	72.91	73.36	19
20	73.55	74.06	75.60	73.27	77.98	73.45	78.79	83.84	78.82	72.93	72.88	73.33	20
21	73.48	74.08	75.31	73.22	76.51	73.22	81.85	84.55	78.87	72.95	72.87	73.35	21
22	73.35	74.04	75.45	73.19	76.43	73.23	81.96	84.68	78.62	72.87	72.87	73.35	22
23	73.40	74.03	75.48	73.13	76.38	73.35	81.63	84.70	75.80	72.86	72.87	73.37	23
24	73.71	74.02	75.51	73.09	76.36	76.48	79.93	84.65	74.36	72.84	72.85	73.39	24
25	73.76	74.04	74.41	73.06	76.27	75.38	79.78	84.58	74.25	72.81	72.93	73.36	25
26	73.79	74.03	73.82	73.02	74.48	74.09	79.79	84.25	73.96	72.87	72.97	73.34	26
27	73.82	74.07	73.70	73.02	73.67	73.31	79.54	82.97	73.67	72.83	72.97	73.36	27
28	73.82	73.94	74.07	73.02	73.39	77.48	78.22	82.63	74.16	72.86	72.94	73.36	28
29	73.81	73.67	75.76	73.01		81.31	78.05	83.37	75.27	72.85	72.89	73.39	29
30	73.79	73.54	75.65	73.05		78.57	77.19	83.23	75.28	72.82	72.91	73.39	30
31	73.80		75.51	73.13		78.22		83.03		72.86	72.91		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 2-63	1500	88.8	4- 7-63	1410	82.8	4-21-63	1400	82.1			
2-10-63	1300	81.9	4- 8-63	2330	84.1	5-11-63	1830	86.1			
3-28-63	2315	84.1	4-12-63	0510	85.9	5-23-63	0530	84.7			

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 44 31	120 56 21	SW24 2S 9E	85800	103.18	12-23-55	JUL 40-DATE	JUL 40-DATE	1940		0.00	USCGS

Station located at Burneyville Bridge, immediately N of Riverbank.

TABLE B-82

DAILY MEAN GAGE HEIGHT

STANISLAUS RIVER AT RIPON

IN FEET

STATION NO	WATER YEAR
B03125	1963

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	37.61	38.04	37.68	39.90	37.70	38.65	45.05	44.15	52.88	40.58	37.91	38.13	1
2	37.57	38.07	37.61	38.71	68.04	38.46	44.65	43.39	50.96	39.70	37.94	38.22	2
3	37.53	38.02	37.57	38.21	54.01	38.32	44.14	45.33	49.44	39.29	38.04	38.06	3
4	37.41	37.88	37.55	38.02	52.10	38.20	44.02	47.80	46.89	39.26	38.10	37.65	4
5	37.59	38.07	37.55	37.92	49.06	38.11	42.44	48.55	45.04	39.36	38.12	37.07	5
6	37.52	38.12	37.54	37.88	47.35	38.03	40.12	49.01	43.51	39.18	38.03	37.93	6
7	37.63	38.13	37.55	37.84	65.25	38.26	44.86	50.34	42.18	39.09	37.93	38.07	7
8	37.58	38.14	37.55	37.80	45.32	38.45	49.55	52.60	43.92	38.93	38.08	38.09	8
9	37.51	38.09	37.55	37.77	45.39	38.07	51.37	53.37	45.04	38.81	37.92	38.25	9
10	37.38	38.02	37.54	37.77	45.87	37.90	49.21	54.49	45.40	38.59	37.94	38.01	10
11	37.57	37.99	37.55	37.76	49.61	38.06	49.58	55.63	45.94	38.42	38.12	37.97	11
12	38.22	37.93	37.56	37.74	49.15	39.76	54.43	55.68	47.00	38.35	38.17	38.17	12
13	38.30	37.94	37.56	37.72	48.27	39.87	54.28	54.80	45.73	38.35	38.11	38.48	13
14	38.43	37.95	37.56	37.67	48.60	39.73	48.58	52.48	43.08	38.46	37.95	38.57	14
15	38.72	37.93	37.58	37.64	47.81	39.38	45.82	49.19	44.39	38.48	37.92	38.43	15
16	38.56	38.03	37.76	37.58	47.42	39.14	48.89	46.20	48.17	38.27	38.00	38.28	16
17	38.28	38.12	38.23	37.48	47.29	41.68	50.23	44.71	48.16	38.33	37.86	38.15	17
18	37.92	38.12	38.17	37.44	47.04	43.06	47.99	45.36	49.92	38.34	37.97	38.18	18
19	37.77	38.10	38.33	37.41	45.92	41.47	46.11	49.44	49.14	38.36	37.91	38.36	19
20	37.77	38.16	39.65	37.40	44.94	38.89	45.21	52.61	46.40	38.35	37.87	38.42	20
21	37.74	38.20	40.03	37.38	43.76	38.38	48.92	53.64	46.58	38.38	37.83	38.44	21
22	37.68	38.22	39.93	37.32	42.66	38.07	51.32	54.30	46.67	38.21	37.89	38.54	22
23	37.59	38.17	40.13	37.28	42.46	38.00	51.49	54.67	44.82	38.16	38.03	38.49	23
24	37.69	38.14	40.20	37.24	42.34	39.29	50.19	54.63	41.74	38.12	37.87	38.43	24
25	37.88	38.16	39.93	37.19	42.26	41.48	48.59	54.63	40.97	38.03	37.97	38.33	25
26	37.95	38.17	38.71	37.16	41.22	39.85	48.40	54.62	40.58	37.98	38.08	38.23	26
27	38.00	38.22	38.24	37.13	39.50	38.58	48.37	54.05	40.07	37.91	38.02	38.23	27
28	38.06	38.22	38.05	37.11	38.94	39.28	46.91	53.00	39.78	37.99	37.94	38.24	28
29	38.06	38.04	39.17	37.10		49.15	45.95	52.96	40.62	38.02	37.92	38.35	29
30	38.06	37.81	40.42	37.13		47.13	45.04	53.38	41.15	38.02	38.06	38.46	30
31	38.03		40.34	37.19		45.32		53.28		37.91	37.94		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 3-63	1100	55.33	4-13-63	0100	55.35	5-25-63	0100	54.64			
3-29-63	1500	50.57	4-17-63	0400	50.30	6-19-63	0030	51.40			
4- 8-63	2200	52.19	5-11-63	2200	55.80						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 43 50	121 06 35	SE29 2S 8E	62500	63.25	12-24-55	APR 40-DATE	APR 40-DATE	1940		0.00	USGS

Station located 15 ft. below the Southern Pacific Railroad Bridge, 1.0 mi. SE of Ripon. Records furn. by U.S.G.S. Flow records are published in U.S.G.S. report, "Surface Water Records of California."

TABLE B-83

DAILY MEAN GAGE HEIGHT

STANISLAUS RIVER AT KOETITZ RANCH

IN FEET

STATION NO	WATER YEAR
803115	1963

DAY	OCT.	NOV.	DEC.	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	28.63	28.49	28.20	30.48	27.71	29.28	36.00E	34.81	43.19	31.41E	28.23	28.35	1
2	28.42	28.51	28.10	29.44	34.86	29.02	35.12E	34.18	41.63	30.41E	28.22	28.43	2
3	28.30	28.50	28.04	28.82	43.24	28.83	34.71	34.94E	39.91	29.99E	28.48	28.20	3
4	28.22	28.34	28.01	28.55	42.95	28.67	34.57	37.00E	37.83	29.83E	28.59	28.01	4
5	28.22	28.48	28.01	28.41	39.42	28.53	33.57	37.92E	35.65	30.03E	28.77	28.14	5
6	28.29	28.56	28.00	28.34	37.93	28.46	31.22	38.32E	34.38	29.85E	28.44	28.12	6
7	28.46	28.58	27.99	28.29	35.89	28.49	34.13	39.39E	32.84	29.69E	28.23	28.33	7
8	28.24	28.59	27.99	28.24	35.58	28.99	39.54	41.29E	34.02	29.57E	28.28	28.47	8
9	28.12	28.57	27.99	28.20	35.78	28.54	40.66	42.56E	35.52	29.43E	28.23	28.63	9
10	28.19	28.49	27.98	28.19	36.37	28.35	40.09	43.84E	35.76	29.31E	28.24	28.24	10
11	28.40	28.45	27.99	28.19	39.41	28.30	39.10	45.05	36.28	29.07E	28.24	28.30	11
12	28.97	28.40	27.99	28.17	39.21	29.84	43.18	45.62	37.22	28.91E	28.34	28.46	12
13	29.12	28.39	27.98	28.15	38.50	30.34	44.62	45.40	36.63E	28.92E	28.20	28.82	13
14	29.30	28.41	27.99	28.13	38.59	30.28	40.00	43.95E	34.10E	28.97E	28.06	29.13	14
15	29.46	28.41	28.00	28.10	38.04	30.01	37.34	40.90E	34.42	28.96E	28.12	28.79	15
16	29.42	28.45	28.13	28.05	37.58	29.72	38.69	37.36E	38.17	28.72E	28.20	28.56	16
17	29.01	28.56	28.49	27.96	37.43	31.16	40.20	35.20E	38.66	28.92	28.05	28.49	17
18	28.57	28.58	28.61	27.90	37.24	33.65	38.68	36.04E	39.62	29.03	28.06	28.52	18
19	28.37	28.54	28.49	27.87	36.43	31.49	36.69	39.56E	39.88	28.94	28.18	28.54	19
20	28.31	28.59	29.61	27.85	35.39	29.91	36.60	41.94E	37.04	28.82	28.09	28.68	20
21	28.29	28.64	30.25	27.83	34.52	29.16	38.57	43.37	37.05	28.86	27.96	28.83	21
22	28.24	28.66	30.17	27.78	33.22	28.75	41.05	44.25	37.17	28.72	28.01	28.81	22
23	28.17	28.64	30.35	27.73	32.99	28.61	41.41	44.67	35.91	28.64	28.30	29.09	23
24	28.17	28.59	30.43	27.68	32.84	29.21	40.59	44.77	32.71	28.42	28.09	28.75	24
25	28.35	28.58	30.34	27.64	32.76	31.96	38.92	44.77	31.79	28.30	28.28	28.62	25
26	28.42	28.61	29.42	27.60	32.15	30.67	38.65	44.75	31.36	28.19	28.22	28.57	26
27	28.47	28.65	28.83	27.57	30.40	29.50	38.62	44.50	30.83	28.18	28.19	28.63	27
28	28.50	28.65	28.57	27.55	29.67	29.50	37.56	43.53	30.39	28.47	28.13	28.70	28
29	28.52	28.54	29.00	27.53		36.84E	36.50	42.96	31.01	28.44	28.09	28.74	29
30	28.52	28.33	30.50	27.53		36.86E	35.80	43.39	31.75	28.45	28.18	28.92	30
31	28.50		30.61	27.56		36.41E		43.48		28.34	28.12		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 3-63	2400	44.2	4-17-63	0700	40.4	5-24-63	2400	44.9			
4-10-63	0200	41.8	4-23-63	1930	41.5	6- 1-63	0000	43.1			
4-13-63	1040	45.0	5-12-63	1600	45.8						

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.& R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF DATUM
37 41 57	121 10 08	SW 2 3S 7E					MAR 50-DATE	1950	1951	0.00	USED
								1951		0.00	USCGS
								1951		3.60	USED

Station located 0.6 mi. NW of Bacon and Gates Road Junction, 3.7 mi. SW of Ripon.

TABLE B-84

DAILY MEAN GAGE HEIGHT

STANISLAUS RIVER NEAR MOUTH

IN FEET

STATION NO	WATER YEAR
803105	1963

DAY	OCT	NOV	DEC.	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT.	DAY
1	NR	16.63	16.65	18.23	16.01	18.80E	23.76	23.14	28.22	19.05	15.44	15.63	1
2	16.54	16.63	16.59	17.63	19.69	18.32	23.07	22.34	27.57	18.09	15.37	15.88	2
3	16.36	16.66	16.45	17.06	26.91	17.94	22.21	22.13	26.47	17.59	15.62	15.60	3
4	16.28	16.56	16.36	16.86	28.10	17.63	21.96	23.77	25.53	17.32	16.09	15.56	4
5	16.30	16.53	16.33	16.73	26.81	17.17	21.44	24.25	23.91	17.28	15.93	15.69	5
6	16.46	16.38	16.33	16.61	26.18	16.99	19.58	24.61	22.56	17.48	15.83	15.33	6
7	16.84	16.48	16.36	16.49	25.18	16.86	20.22	24.85	21.10	17.35	15.72	15.46	7
8	16.52	16.48	16.44	16.49	23.70	17.08	24.70	26.01	21.13	17.29	15.68	15.89	8
9	16.16	16.51	16.47	16.48	23.28	16.96	25.64	26.57	22.21	17.12	15.60	16.08	9
10	16.21	16.55	16.43	16.54	23.43	16.64	26.26	27.07	22.42	16.90	15.76	15.69	10
11	16.60	16.52	16.32	16.46	25.44	16.34	25.25	28.00	22.89	16.70	15.74	15.71	11
12	16.90	16.42	16.36	16.48	25.78	16.87	27.43	28.93	23.78	16.52	15.70	15.99	12
13	17.42	16.40	16.42	16.44	25.26	17.67	28.70	29.08	23.31	16.38	15.44	16.45	13
14	17.46	16.32	16.44	16.38	25.41	17.76	26.53	28.03	21.42	16.43	15.25	16.73	14
15	17.58	16.34	16.39	16.33	26.32	17.65	24.32	25.94	20.60	16.51	15.11	16.56	15
16	17.64	16.38	16.42	16.28	25.75	17.55	25.25	23.90	23.33	16.35	15.10	16.29	16
17	17.28	16.47	16.48	16.22	25.04	18.23	26.28	22.51	24.03	16.07	15.34	16.21	17
18	16.89	16.52	16.67	16.18	24.67	20.51	25.24	22.18	24.19	16.04	15.47	16.21	18
19	16.65	16.53	16.69	16.14	24.22	19.25	23.79	23.97	24.93	16.12	15.58	16.10	19
20	16.50	16.52	17.22	16.12	23.79	18.05	23.77	26.15	23.30	16.09	15.70	16.22	20
21	16.50	16.65	17.90	16.09	22.96	17.20	24.84	27.05	23.80	16.09	15.30	16.44	21
22	16.46	16.69	18.03	16.06	21.88	16.73	26.44	27.74	24.21	16.06	15.32	16.41	22
23	16.36	16.69	18.17	16.02	21.52	16.74	26.71	28.22	23.47	15.84	15.57	16.78	23
24	16.31	16.67	18.20	15.99	21.21E	16.81	26.50	28.39	21.11	15.79	15.55	16.58	24
25	16.45	16.67	18.21	15.96	20.87E	18.80	25.57	28.61	19.79	15.67	15.72	16.35	25
26	16.54	16.67	17.71	15.92	20.40E	18.15	25.33	28.77	18.90	15.56	15.48	16.39	26
27	16.58	16.69	17.10	15.89	19.55E	17.24	25.34	28.79	18.42	15.44	15.64	16.23	27
28	16.62	16.73	16.89	15.87	19.11E	17.25	24.94	28.14	17.93	15.43	15.30	16.17	28
29	16.64	16.77	16.87	15.86		22.05	23.92	27.73	18.19	15.67	15.39	16.45	29
30	16.64	16.73	17.90	15.88		24.58	23.48	28.11	19.03	15.48	15.68	16.37	30
31	16.64		18.26	15.91		23.83		28.34		15.37	15.61		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 4-63	0850	28.30	4-13-63	1610	28.93	5-13-63	0450	29.22			
2-15-63	1030	26.44	4-17-63	0800	26.42	5-27-63	1000	28.88			
4-10-63	0610	26.71	4-24-63	0800	26.29	5-31-63	1950	28.35			

LOCATION			MAXIMUM DISCHARGE OF RECORD			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	C.F.S.	GAGE HT.	DATE	DISCHARGE	GAGE HEIGHT ONLY	PERIOD FROM	PERIOD TO	ZERO ON GAGE	REF. DATUM
37 40 02	121 13 41	SW17 3S 7E				SEP 51-DATE	SEP 51-DATE	1951	1959	1.11	USCGS
								1959		0.00	USCGS

Station located 1.9 mi. above mouth, 7.7 mi. SW of Ripon. Backwater from San Joaquin River at times affects the stage-discharge relationship. Prior records available at other sites. Drainage area 1,091 sq. mi. Altitude of gage is approx. 25 ft. (from U.S.G.S. topographic map).

TABLE B-85

DAILY MEAN GAGE HEIGHT

SAN JOAQUIN RIVER NEAR VERNALIS

IN FEET

STATION NO	WATER YEAR
B07020	1963

DAY	OCT.	NOV.	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	DAY
1	11.43	12.16	13.62	13.17	12.95	16.29	20.31	19.99	23.71	15.11	NR	11.49	1
2	11.48	12.17	13.56	13.15	15.38	15.79	19.39	19.23	23.36	14.62	NR	11.60	2
3	11.50	12.17	13.10	12.79	20.72	15.36	17.86	18.24	22.68	14.39	NR	11.62	3
4	11.54	12.17	12.83	13.29	23.03	14.96	17.35	18.49	22.11	13.53	NR	11.61	4
5	11.62	12.14	13.13	13.28	22.95	14.14	16.92	18.58	20.97	13.35	NR	11.59	5
6	11.63	12.00	13.32	12.89	22.72	13.96	15.73	18.67	19.60	13.18	NR	11.59	6
7	11.76	11.89	13.55	NR	22.18	13.68	15.43	18.54	18.33	13.03	NR	11.58	7
8	11.70	11.91	13.75	NR	20.28	13.41	18.00	18.65	17.71	13.52	NR	11.64	8
9	11.37	11.97	13.69	12.81	NR	13.22	19.97	18.91	17.95	13.50	NR	11.74	9
10	11.20	12.00	13.28	13.03	NR	13.01	21.25	19.39	18.27	13.30	NR	11.78	10
11	11.32	12.02	13.05	12.88	NR	NR	20.90	20.24	18.44	13.58	NR	11.77	11
12	11.62	12.03	13.56	13.03	NR	NR	22.34	22.06	19.57	13.26	NR	11.69	12
13	12.30	12.05	13.52	13.08	NR	NR	23.35	23.12	18.86	13.30	NR	11.71	13
14	12.79	12.06	13.49	12.74	NR	NR	21.95	22.67	16.39	13.07	NR	11.87	14
15	12.97	12.12	13.28	NR	22.91	11.98	19.96	21.19	15.17	12.84	NR	NR	15
16	13.02	12.17	13.22	NR	22.36	11.97	21.21	19.78	16.62	NR	NR	NR	16
17	12.83	12.21	13.06	NR	21.34	12.54	21.90	18.65	17.41	NR	NR	12.63	17
18	12.49	12.22	12.84	NR	20.83	13.53	20.48	17.79	16.82	NR	NR	12.64	18
19	12.26	12.20	13.38	NR	20.51	13.12	19.47	18.23	17.96	NR	11.39	12.66	19
20	12.13	12.13	13.71	NR	20.50	NR	19.62	19.93	18.31	NR	11.39	12.67	20
21	12.08	12.18	13.97	NR	19.53	12.17	20.62	20.94	19.85	NR	11.37	12.74	21
22	12.01	12.20	14.25	NR	18.71	11.92	21.60	21.55	20.63	NR	11.31	12.86	22
23	11.84	12.24	14.37	NR	18.37	11.97	21.72	22.09	20.07	NR	11.32	13.08	23
24	11.69	12.18	14.10	NR	17.97	12.15	21.70	22.37	18.25	NR	11.38	12.96	24
25	11.75	12.41	13.82	NR	17.43	NR	21.23	22.89	16.97	NR	11.45	12.87	25
26	11.85	12.76	13.71	NR	17.09	12.76	21.03	23.31	15.64	NR	11.55	12.77	26
27	11.94	12.70	13.25	NR	16.90	12.49	21.11	23.52	14.95	NR	11.50	12.61	27
28	12.02	13.15	13.48	NR	16.60	12.54	20.99	23.15	14.30	NR	11.33	12.39	28
29	12.08	13.31	13.25	NR		NR	20.01	22.96	14.06	NR	11.31	12.20	29
30	12.13	13.47	13.44	NR		19.35	19.67	23.49	14.80	NR	11.36	12.12	30
31	12.15		13.47	NR		20.08		23.77		NR	11.43		31

E - Estimated
NR - No Record
NF - No Flow

CREST STAGES											
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
2- 4-63	2000	23.27	4-17-63	0600	22.12	5-31-63	1400	23.80			
2-15-63	1500	23.09	5-13-63	1400	23.20						
4-13-63	1400	23.35	5-27-63	1100	23.55						

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37 40 34	121 15 51		79000	27.75	12-9-50	JUL 22-DEC 23	JUL 22-DEC 23	1931		8.4	USED
						JAN 24-FEB 25	JAN 24-FEB 25				
						JUN 25-OCT 28	JUN 25-OCT 28		1959	5.06	USCGS
						MAY 29-DATE	MAY 29-DATE	1959		0.00	USCGS

Station located 30 ft. above the Durham Ferry Highway Bridge, 3 mi. below the Stanislaus River, 3.4 mi. NE of Vernalis. Records furn. by U.S.G.S. Drainage area is approx. 14,010 sq. mi.

TABLE B-

DIVERSIONS - SAN JOAQUIN RIVER
(Vernalis to Fremont Ford Bridge)
October 1962 through September 1963

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversion in Acre Feet: Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total Diversion Oct - Sept Acre Feet
DURHAM FERRY BRIDGE	76.[illegible]														
GAGING STATION - SAN JOAQUIN RIVER NEAR VERNALIS	76.7														
Cook Land and Cattle Company	78.9R	1-14" 1-20"	110	3		1					222	540	433	173	1482
Cruze, Trudel and Gillmeister	79.4R	1-20"	2	1				1	1	38	58	50	166	94	411
STANISLAUS RIVER	79.7R														
Faith Ranch	79.8R	1-16"		75				21			119	295	423	255	1188
W. C. Blewett Estate	80.7L	1-12"						219	22		332	40	578	160	1351
W. C. Blewett Estate	81.8L	2-12" 1-14"	64					314		435	660	1055	1099	350	3977
GAGING STATION - SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE	81.85														
Blewett Mutual Water Company	81.95L	1-10" 2-12"	43					394		1262	954	1051	1050	530	5284
El Solyo Water District	82.0L	1-10" 1-16" 3-18"	168					964	238	2040	2458	2730	2455	1301	12350
GAGING STATION - SAN JOAQUIN RIVER AT HETCH HETCHY AQUEDUCT CROSSING	82.65														
El Solyo Ranch	82.9L	1-16"	32							71	59	199	242	250	853
El Solyo Ranch	83.5L	1-12"	1							23	20	28	27	32	131
El Solyo Ranch	83.7L	1-12"	33							114	86	232	244	146	855
Faith Ranch	84.4R	1-16" 1-20"	122	56	43			378	64	449	572	736	792	623	3835
TUOLUMNE RIVER	91.0R														
GAGING STATION - SAN JOAQUIN RIVER AT WEST STANISLAUS IRRIGATION DISTRICT INTAKE CANAL	91.8L														
WEST STANISLAUS IRRIGATION DISTRICT INTAKE CANAL	91.8L														
West Stanislaus Irrigation District	91.8L	1-12" 1-24" 6-26"	1260	493	277	577	0	4597	583	10660	13240	12820	9222	4662	58390
Fred Lara #1	** (0.6S)	1-14"		45		1		81		255	369	147	380	77	1355
Frank Sarmento #1	** (0.7N)	3-16" a	94					106		302	192	370	351	290	1705
Frank Sarmento #2	** (1.1N)	1-14" 1-16"	68					292	1	701	632	385	556	404	3039
Fred Lara #2	** (2.2S)	1-16"				12		13		7	37	48	65	28	210
Frank Sarmento #3	** (2.3N)	2-16"	125					176		391	373	391	363	373	2192
J. V. Steenstrup Estate	93.1R	1-12" 1-14" b						70		328	476	706	846	535	2961 c
T. C. Daily	94.1L	1- 3" 1- 6"						25	16	66	60	74	101	22	364
Rancho Dos Rios	94.7R	1-12"	54		34	1		54	1	192	279	345	338	280	1583
E. L. Brazil	95.5R	1-16"		59	3		3	115		90	90	161	122	43	686
Charles Correia	95.8R	1-10"										51	51		102
GAGING STATION - SAN JOAQUIN RIVER AT GRAYSON	95.95L														
Island Dairy (d)	96.0L	1-18"			27			137		512	402	476	435	227	2216 c
LAIRD SLOUGH BRIDGE	96.05														
E. S. Brush	98.5R	1- 7"								61	85	84	62	58	350
Rancho El Pescadero	98.9L	1-18"	51	18	45			191		584	232	477	470	259	2327
GAGING STATION - SAN JOAQUIN RIVER AT PATTERSON BRIDGE	104.4L														
Patterson Water District	104.4L	1-14" 2-18" 3-20" 1-36"	158					848		5878	7684	7948	7948	7903	38370
Chase Brothers	104.5R	1-18"	13	13				28		49	167	280	598	276	1424
PATTERSON BRIDGE	104.6														
Chase Brothers	106.5R	1-12"	23	24				98		319	535	517	445	271	2232
Tony Spinelli	109.1R	1-12"	40					27		57	12	39	69	44	288
Twin Oaks Irrigation Company	109.8L	1-12" 2-16" 1-18"	328	45	86			562		1962	1913	1338	1880	1015	9129 c
T. J. Henderson	11[illegible].8R	2- 8"	108							95	35	77	19	87	421
L. A. Thompson	112.55R	1-18"	54					63		49	94	241	242		743
Frank C. Mosier	113.4R	1-12"	115	2	4			100	20	189	153	155	156	130	1024
GAGING STATION - SAN JOAQUIN RIVER AT CROWS LANDING BRIDGE	113.4														
Frank C. Mosier	114.63R	1- 8"						No Diversion							
Manuel A. Serpa	114.75R	2-10"						227		229	631	577	479	107	2251
ORESTIMBA CREEK	115.2L														
Roy F. Crow	115.8L	1-10"						9	23	61	137	192	366	144	932
L. B. Crow	116.0[illegible]L	1-14"	77		54			29		180	137	168	217	8[illegible]	947
John W. Greer	116.5R	1-12"	2					111	22	195	46	80	82		538

TABLE B-86

DIVERSIONS - SAN JOAQUIN RIVER
(Vernalis to Fremont Ford Bridge) (Continued)
October 1962 through September 1963

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversion in Acre-Feet												Total Diversion Oct.–Sept Acre-Feet
			Oct.	Nov.	Dec	Jan	Feb.	Mar	Apr	May	June	July	Aug	Sept.	
Stevinson Water District	121.3R	1-18"	2	3						95	190	204	183	81	758
MERCED RIVER SLOUGH	122.2R														
GAGING STATION - SAN JOAQUIN RIVER NEAR NEWMAN	123.7														
MERCED RIVER	123.75R														
Stevinson Corporation	129.1L	1-16"			6		128			62	151	30	130	68	575
VERNALIS TO FREMONT FORD BRIDGE															
Total			3152	837	579	592	132	10250	991	28000	33890	35340	33680	21380	168800
Average cubic feet per second			51	14	9	10	2	166	17	455	570	574	548	360	233
Monthly use in percent of seasonal			1.9	0.5	0.3	0.4	0.1	6.1	0.6	16.6	20.1	20.8	20.0	12.6	

* Mileage along San Joaquin River from its mouth, 4.5 miles below Antioch.

** West Stanislaus Irrigation District Canal. The intake canal joins the San Joaquin River at mile 91.8L. Distance from the river and the bank is shown in parentheses.

a One 16" unit was removed in 1963.
b Replaces a 12" unit.
c Includes an undetermined amount of water returned to river by spill.
d Formerly listed as W. F. Cook

TABLE B-87

DIVERSIONS - SAN JOAQUIN RIVER
(Fremont Ford Bridge to Gravelly Ford)
October 1962 through September 1963

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversion in Acre-Feet Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug	Sept.	Total Diversion Oct. – Sept. Acre-Feet
GAGING STATION - SAN JOAQUIN RIVER AT FREMONT FORD BRIDGE	129.5														
GAGING STATION - SAN JOAQUIN RIVER NEAR DOS PALOS	186.0														
San Luis Canal Company (a)	186.6L	Gravity	7449	3574	2100	3386	4326	11203	12077	21955	26852	28153	25837	16623	163535
FIREBAUGH BRIDGE	198.4														
GAGING STATION - SAN JOAQUIN RIVER NEAR MENDOTA	206.2														
MENDOTA DAM	208.63														
Central California Irrigation District (a)	208.8L	Gravity	21012	12277	3311	4806	10989	47353	28719	72893	81878	87742	84987	41667	497634
FRESNO SLOUGH	δ 209.0L														
DELTA-MENDOTA CANAL	(0.2L)														
Firebaugh Canal Company (a)	(0.4L)		1203	369	234		591	5216	4840	10494	12361	14168	14168	4973	68617
M. Jensen (b)								No Diversion							
M. L. Dudley	δ (3.4L)							405	268	444	434	595	309	46	2501
State of California Mendota Waterfowl Management (b)	δ (6.45-8.20)	1-16"	3917	2174	700				30	234	2319	2670	2533	3112	17689
Fresno Slough Water District (b)	δ (9.20-10.50)						60	736	16	341	1309	1037	1111	192	4802
JAMES BYPASS	δ (11.80R)														
Traction Water District (b)	δδ(0.75)		524	315	50		54	559	214	623	748	619	668	494	4868
Reclamation District 1606 (b)	δδ(1.50)						22	67		67	153	171	167	14	661
James Irrigation District (b)	δδ(4.4)						1093	4941	1513	990	5619	7182	6028	496	27862
Tranquillity Irrigation District (b)	δ(12.00-13.75)		204				1777	4066				557	6306	1414	14324
Melvin O. Hughes (b)	δ (12.20)							30			36				66
LONE WILLOW SLOUGH	219.8R														
Columbia Canal Company (a)	219.8R		3368	2846	1006	40	3207	4372	6668	8255	8664	8785	8959	5786	61956
State Center Duck Club (c) (b)				141	129									4	274
C. Sawall (d) (b)								No Diversion							
Mendota Duck Club (e) (b)								No Diversion							
M. Beck (f) (b)			44	10											54
E. P. Jennings (b)			6					52	58	4	22	10	28		180
F. A. Yearout (b)							77	102	26	87	161	115	209		777
Tulle Gun Club (g) (b)								No Diversion							
GAGING STATION - SAN JOAQUIN RIVER AT WHITEHOUSE	219.83														
GRAVELLY FORD CANAL	232.8R														
FREMONT FORD BRIDGE TO GRAVELLY FORD															
Total			37727	21706	7530	8232	22196	79102	54429	116387	140556	151804	151310	74821	865800
Average cubic feet per second			614	365	122	134	400	1286	915	1893	2362	2469	2461	1257	1196
Monthly use in percent of seasonal			4.4	2.5	0.9	1.0	2.6	9.1	6.3	13.4	16.2	17.5	17.5	8.6	

* Mileage along San Joaquin River from its mouth 4.5 miles below Antioch.
δ Plant is located on Fresno Slough which diverts from San Joaquin River at mile 209.0L. Distances from San Joaquin River and bank are shown in parentheses.
δδ Plant is located on James Bypass which diverts from Fresno Slough at Mile δ (11.80R). Distances from Fresno Slough and bank are shown in parentheses.
(a) Records furnished by contracting entities.
(b) Records furnished by U.S. Bureau of Reclamation.

(c) 1- 6" pump located on arm of slough, at SW corner S.12, T14S, R15E.
(d) 1-8" pump located on arm of slough, 1500' W of SE corner, S.18, T14S, R16E.
(e) 1-8" pump located on arm of slough, at S¼ corner, S.11, T14S, R15E.
(f) 1-8" pump located on arm of slough, 1400' S of NE corner, S.24, T14S, R15E.
(g) 1-8" pump located on arm of slough, adjacent to M. Beck

TABLE B-88

DIVERSIONS - SAN JOAQUIN RIVER
(Gravelly Ford to Friant Dam)
October 1962 through September 1963

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversion in Acre-Feet												Total Diversion Oct.-Sept Acre Feet
			Oct.	Nov	Dec	Jan	Feb.	Mar	Apr	May	June	July	Aug	Sept	
W. A. Kochergen 1	233.66R	1-6"	31								23	71	38	19	182
Dewey W. Johnson 1	235.33R	1-5" 1-10"						10	11	5	24	32	54	30	166
Hansen, Smith and McIntuf	237.33L	1-8"		10				33	18			46			107
J. A. Peterson (a)(c)	237.98R	1-6"													
--SKAGGS BRIDGE--	238.18														
A. and M. Overgaard	243.84R	1-5" 1-6"	5		3	2	1	32	20	19	52				134
--U. S. 99 HIGHWAY BRIDGE--	247.38														
--SANTA FE RAILROAD BRIDGE--	249.23														
Miller Brothers	251.46L	1-6"	8			3	1			37	62	73	69	36	289
L. L. Howard (c)	254.93R	1-6"													
Sycamore Island Stock Ranch 5 (b)	255.34R	1-6"						3			20	82	77		182
Oscar Spano River Ranch 1	257.10L	1-16"	11					14	33	100	120	158	165	124	725
Oscar Spano River Ranch 2	257.70L	1-12"	33	3				34	16	81	79	92	70	54	462
L. D. Cobb	258.08R	1-6" 1-7"						43		53	149	208	134	30	617
--STATE HIGHWAY 41 BRIDGE--	258.33														
R. J. Curtis	258.39L	1-4" 1-7"						89	35	55	40	100	56	68	443
W. E. Roberts 2	258.90L	1-12"	17		1	1	1	1	1	33	90	85	80	82	392
J. E. Cobb	259.39R	2-6"	2	4			18	40		3	56	76	75	7	281
--OLD LANES BRIDGE--	259.78														
J. E. Cobb 3	260.40R	1-6"	49	17		4	4	40	8	91	142	95	124	80	654
R. C. Arnold	261.53R	1-4" 1-5"		2				14		36	66	123	96	26	363
Duane M. Folsom	261.70L	1-6"	64	19				15	12	28	89	136	156	76	595
E. G. Rank, Jr.	262.32L	1-5"	21	10	3	1		8		27	68	70	79	36	323
Dale McCoon 1	262.60R	1-5"						57	5		65	76	77	6	286
W. H. Rohde	262.66L	1-7"	3			52	10		4	1	45	75	78	19	287
Dale McCoon 2	263.40R	1-7"						96	7		101	127	114	8	453
Dale McCoon 3	263.48R	1-6"						43	2		95	116	77	2	335
H. K. Jensen	263.76R	1-5"		35	1	11	10			40	83	100	98	71	449
H. W. Ball 4 (c)	264.08L	1-6"													
Ike D. Ball	264.60R	1-6"	37	26				32		80	113	117	116	88	609
W. F. Ball	264.83L	1-4" 1-5"	30	20	6	5	4			51	47	102	75	46	386
Virgil Durando	267.56L	1-8"	32		13	10	8	4	12	27	160	212	219	146	843
--GAGING STATION - SAN JOAQUIN RIVER BELOW FRIANT--	268.13L														
--FRIANT BRIDGE--	268.88														
--COTTONWOOD CREEK--	269.53R														
--FRIANT DAM--	269.63														
GRAVELLY FORD TO FRIANT DAM															
Total			343	146	27	89	57	608	184	767	1789	2372	2127	1054	9563
Average cubic feet per second			6	2.5	0.4	1.4	1.0	9.9	3.0	12	30	39	35	18	13
Monthly use in per cent of seasonal			3.6	1.5	0.3	0.9	0.6	6.4	1.9	8.0	18.7	24.8	22.3	11.0	

* Mileage along San Joaquin River from its mouth 4½ miles below Antioch.

a Monthly diversion for October published in error as 0 in 1962 report. Should have been 18 acre-feet.

b Not published in 1962 report. 174 acre-feet were diverted during 1962 diversion year.

c Data not published as current 3-year seasonal average is less than 200 acre-feet.

TABLE B-89

DIVERSIONS - MERCED RIVER
October 1962 through September 1963

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversion in Acre-Feet Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total Diversion Oct.-Sept Acre-Feet
HILLS FERRY BRIDGE	1.1														
Stevinson Water District #1	1.8R	1-16"					57			73	252	445	185	32	1044
Stevinson Water District #2	3.8R	1-16"	100	16	3	2	89	215		644	626	835	851	524	3905
Milton Gordon	4.3L	1-10"	17	8	6	4	5	3	2		14	32	27	19	137
GAGING STATION - MERCED RIVER NEAR STEVINSON	4.6														
Maria DeAngelis	5.8L	1-12"								36	48	56	24	36	200
Stevinson Water District	6.1L	1-20"	32	49	8		42	434		225	795	486	577	171	2819
Stevinson Water District #3	7.7L	1-20"	192	74			18	126		103	68	46	222	11	B60
Manuel Clemintino	8.5L	1-12"									31	77	38	27	173
Manuel Clemintino	8.9L	1-12"								14	51	62	70	35	232
Samuel B. McCullagh	9.4L	1- 8"		34						11	107	220	90	48	510
Mrs. J. R. Jacinto	9.6L	1-12"	47				14			33	70	130	59	45	398
Mrs. J. B. Silva, E. and J. Gallo Winery Ranch L. Alves and A. Mattos	10.35L	1-10"	54	12	5	6	2	6	3	164	198	458	119	117	1144
R. E. Prusso and John Vierra	10.9L	(a) 1- 8" 1-12"	66	13						57	113	87	121	88	545
Manuel Freitas	10.9L	1-12"	30	30						59	100	100	105	10B	532
E. and J. Gallo Winery Ranch	11.6L	1-18"	245	30				54	43	50	350	461	289		1522
MILLIKEN BRIDGE	11.65														
E. and J. Gallo Winery Ranch	12.35L	1-10"	5	74	6			3	4			61	7		160
Anthony L. Calderia	12.5R	1-12"	9					7		18	29	60	27	55	205
E. and J. Gallo Winery Ranch	12.85L	1-12"	5	111	19			5	27	12	231	274	30		714
J. M. Souza	14.5L	1-10"	32								57	136	88	35	348
GAGING STATION - MERCED RIVER NEAR LIVINGSTON	16.49														
E. and J. Gallo Winery Ranch	16.5L	1-14"		127	49	9	2		15	11	195	180	134		722
J. E. Gallo	20.4L	1-8" (b)	1	94	52			124	14	3	178	176	8		650
U.S. HIGHWAY 99 BRIDGE	21.04														
SOUTHERN PACIFIC RAILROAD BRIDGE	21.05														
Gallo Cattle Company	22.2R	1- 8" 1-16"	57	178	10	2	1	175	27	235	338	475	300	237	2035
Gallo Cattle Company	22.8R	1-12" 1-15"	1B0	73	72			121	24	146	315	415	359	132	1837
Merced River Farms Association	26.3R	1- 8"	12				19	5		33	81	78	97	32	357
SANTE FE RAILROAD BRIDGE	27.05														
W. C. Magneson	27.5R	1-10"	14							1	72	81	103	92	363
GAGING STATION - MERCED RIVER AT CRESSEY	27.55														
CRESSEY BRIDGE	27.55														
Manuel Silva	29.9R	1- 6" 1-10"									45	81	50	47	223
Manuel Silva	30.95R	1-12"									99	137	95	84	415
Rancho Con Valor	31.1L	1- 8"		1						97	107	111	84	57	457
Manuel Silva	31.4R	1-10"								155	226	226	213	146	966
P. Hilarides	32.3L	1-12"		59								5	39	2	105
SHAFFER BRIDGE	32.5														
Harry P. Schmidt and Son	33.1R	1-10"									93	55	110	18	276
Walter Bettencourt	34.45L	1-12"						No Diversion							
W. F. Bettencourt, P. Hilarides and Cowel Lime and Cement Company	36.9L	Gravity	180	83	155	179	89	58	362	598	803	1414	1341	802	6064
Amsterdam Orchards Incorporated (c)	39.1L	1-14"					83	123	12	27	40	23	13		321
Ratzlaff Brothers	40.2L	1- 4"								21	43	53	46	26	189
COX FERRY BRIDGE	42.1														
Cowel Ditch	45.3R	Gravity	65B	498	772	849	397	2899	2717	3650	2791	4151	3812	3126	26320
GAGING STATION - MERCED RIVER BELOW SNELLING	46.2														
MERCED RIVER															
Total			1936	1564	1157	1051	B18	4358	3250	6476	8566	11690	9733	6152	56750
Average cubic feet per second			31	26	19	17	15	71	55	105	144	190	158	103	78
Monthly use in percent of seasonal			3.4	2.8	2.0	1.9	1.4	7.7	5.7	11.4	15.1	20.6	17.2	10.8	

a A 5" unit was removed in 1963.
b Replaces a 7" unit.
c Formerly listed as Reinero Brothers.

TABLE B-9

DIVERSIONS - TUOLUMNE RIVER
October 1962 through September 1963

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversion in Acre-Feet												Total Diversion Oct.-Sept Acre-Feet
			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	
E. T. Mape	1.3R	1-14"	253	264	50	19		292		589	541	988	935	664	4595
J. V. Steenstrup Estate	1.9L	2-12"						72	1	171	400	509	595	132	1880
J. V. Steenstrup Estate	2.9L	1-10"			1	1	1	319	45	185	506	331	452	213	2054
GAGING STATION - TUOLUMNE RIVER AT TUOLUMNE CITY (SHILOH BRIDGE)	3.35														
Bancroft Fruit Farms	5.0R	1-10"	4					22	3	38	56	59	41	53	276
Della Battestin	5.9L	1-14"						No Diversion							
Western Farms	6.3L	1-16"				1				9	78	115	143	65	411
Eugene Boone, Galen Hartwich and Dr. Harold Willis	7.1R	1-10"								94	75	83	79	48	379
Beth Wootten	8.4R	1-10"	19							10	46	60	56	62	253
Ella T. Rahilly Estate	8.5L	1-10"								41	29	58	43	51	222
A. C. Watkins Estate	9.4L	1-20"	62	82	1			73		41	103	36	68	20	486
A. C. Watkins Estate	9.6L	1-12"	116					Plant Removed							116
McClure Ranches	9.7R	1-21"							19	33	106	64	63	43	328
Raymond Boone	10.2R	1-14"	4							25	162	126	107	100	524
CARPENTER ROAD BRIDGE	12.9														
SEVENTH STREET BRIDGE	15.75														
SOUTHERN PACIFIC RAILROAD BRIDGE	15.8														
U.S. HIGHWAY 99 BRIDGE	16.05														
GAGING STATION - TUOLUMNE RIVER AT MODESTO	16.05														
DRY CREEK	16.5R														
EAST MODESTO BRIDGE	19.3														
Jack Gardella	20.3R	1-10"	4					11		36	51	34	40	27	203
SANTA FE RAILROAD BRIDGE	21.6														
SANTA FE ROAD BRIDGE	21.65														
Mrs. A. L. Leib (a)	22.8R	1- 3" 1- 6"	4							20	11	30	30	7	102
GEER AVENUE BRIDGE	26.0														
Michel Investment Company	28.8R	1- 8"	15	1						41	95	76	108	40	376
J. W. and Lola May Short	29.8L	1-10"		5							13	77	44	37	176
Firpo Ranch	30.2L	1-10"	36	3	16			14		51	65	95	83	87	450
SOUTHERN PACIFIC RAILROAD BRIDGE (OAKDALE BRANCH)	31.5														
A. E. Ketcham Estate	39.4R	1- 8"	11	33						20	92	83	93	56	388
Westley N. Sawyer (b)	39.8R	1- 8" c								13	55	58	46	36	208
GAGING STATION - TUOLUMNE RIVER AT ROBERTS FERRY BRIDGE	39.9														
Westley N. Sawyer	40.8L	1-14"	6							57	87	93	100	46	389
Curtner Zanker	45.7L	1-10"	14		1	1		1	1	38	100	82	79	60	377
Dolling Brothers	46.3R	1- 8"	22							71	68	100	80	95	436
STATE HIGHWAY 132 BRIDGE	47.4														
GAGING STATION - TUOLUMNE RIVER AT LA GRANGE BRIDGE	50.5														
TUOLUMNE RIVER															
Total			570	388	69	22	1	804	69	1583	2739	3157	3285	1942	14630
Average cubic feet per second			9	7	1	0	0	13	1	26	46	51	53	33	20
Monthly use in percent of seasonal			3.9	2.6	.5	.2	0	5.5	.5	10.8	18.7	21.6	22.4	13.3	

a Formerly listed as A. L. Leib
b Formerly listed as George H. Sawyer
c Replaces a 6" unit.

TABLE B-91

DIVERSIONS - DRY CREEK
October 1962 through September 196[illegible]

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversion in Acre-Feet												Total Diversion Oct.– Sept. Acre-Feet
			Oct.	Nov.	Dec.	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept	
Podesto and Arata	0.4R	1- 6"							Plant Dropped						
MODESTO-EMPIRE TRACTION COMPANY RAILROAD BRIDGE	0.7														
STATE HIGHWAY 132 BRIDGE (YOSEMITE BOULEVARD)	0.8														
LA LOMA BRIDGE	1.2														
EL VISTA AVENUE BRIDGE	2.9														
GAGING STATION - DRY CREEK NEAR MODESTO	5.3R														
CLAUS ROAD BRIDGE	5.4														
SANTA FE RAILROAD BRIDGE	6.4														
CHURCH STREET BRIDGE	7.2														
WELLSFORD ROAD BRIDGE	8.7														
ALBERS ROAD BRIDGE	11.0														
MODESTO IRRIGATION DISTRICT CANAL CROSSING	11.1														
Edward Johnson	12.6R	1- 6"	6							6	34	49	38	31	164
Edward Johnson	12.7R	1- 6"	10							61	77	90	74	46	358
Joe Fagundes	14.7R	1-10"	30	3	11	6	1	59	13	123	150	182	165	103	846
OAKDALE WATERFORD HIGHWAY BRIDGE	17.4														
DRY CREEK															
Total			46	3	11	6	1	59	13	190	261	321	277	180	1368
Average cubic feet per second			1	0	0	0	0	1	0	3	4	5	5	3	1.9
Monthly use in percent of seasonal			3.9	.2	.8	.4	.1	4.3	1.0	13.8	19.0	23.3	20.1	13.1	

TABLE 3-92

DIVERSIONS - STANISLAUS RIVER
October 1962 through September 1963

Water User	Mile and Bank above Mouth	Number and Size of Pump	Monthly Diversion in Acre Feet												Total Diversion Oct - Sept Acre Feet
			Oct.	Nov	Dec	Jan	Feb	Mar	Apr.	May	June	July	Aug	Sept	
GAGING STATION - STANISLAUS RIVER NEAR MOUTH	1.9R														
Cook Land and Cattle Company and C. M. Carroll	1.9R	1-16"									17	93	28	44	[illegible]
C. C. Angyal	2.4R	1-18"						[illegible]	14	148	269	246	142	[illegible]	[illegible] a
Faith Ranch	3.4L	2-12" 1-16"	115	84				255	1	522	577	49	469	[illegible]	[illegible]
Reclamation District 2064	4.0R	1-14" 1-16" 2-20"	403	111		[illegible]		383		1462	[illegible]	2341	1825	[illegible]	9431
Reclamation District 2075	4.05R	2-16" 1-20"	597	199	40	13		1293		2576	2600	3119	2829	2170	15440
D. F. Koetitz	4.7L	1-14"	25							208	163	291	257	[illegible]	1001
E. T. Mape	4.75L	1-20"		290				262		61	194	37			844
Henry Pelucca	5.5L	1-16"								39	113	86	71	76	385
Alice Gill	6.4L	1-12"	2							46	533	99	[illegible]	124	680 a
D. J. Macedo	8.4R	1-16"						112		342	119	562	349	181	1665
N. E. Cannon	8.7R	1-10"	58	15				80		420	290	422	388	271	1944
GAGING STATION - STANISLAUS RIVER AT KOETITZ RANCH	9.35L														
D. F. Koetitz	9.4L	1-12"	113		4					421	357	466	363	199	1923
John L. Hertle	9.8L	1-10"							40	10	31	39	65	[illegible]	212
Nelson Santos	10.0R	1-16"	39								6	91	39	49	224
Nelson Santos	10.5R	1-16"	11								73	153	139	124	500
John L. Hertle	10.7L	1-10"									3		5	23	31
GAGING STATION - STANISLAUS RIVER AT RIPON	15.7L														
SOUTHERN PACIFIC RAILROAD BRIDGE	15.7														
U.S. HIGHWAY 99 BRIDGE	15.7														
A. Girardi	17.7L	1-16"			1		1			95	412	446	287	34	1276 a
E. J. Freethy	19.0R	1-14"	26	55				35		19	90	188	157	43	613
Libby, McNeill and Libby	20.9R	1-14"							12	367	202	305	189	[illegible]	1182
Heath Ranch	21.2L	1- 6"	24					28		15	66	70	41	14	258
Mark Rumble b	23.4L	1- 8"										5	[illegible]	5	17
MODESTO-ESCALON HIGHWAY BRIDGE	29.6														
F. K. Floden	29.9L	1-10"						No Diversion							
SANTA FE RAILROAD BRIDGE	33.4														
GAGING STATION - STANISLAUS RIVER AT RIVERBANK	33.6														
Oakdale Irrigation District (Crawford pump) c	37.7L	1-14"						10	12	5	176	212	132	5	[illegible] a
Oakdale Irrigation District (Brady pump) c	39.1L	1-12"								29	140	161	124	[illegible]	[illegible] a
OAKDALE-STOCKTON HIGHWAY BRIDGE	41.2														
SOUTHERN PACIFIC RAILROAD BRIDGE (OAKDALE BRANCH)	41.2														
GAGING STATION - STANISLAUS RIVER AT ORANGE BLOSSOM BRIDGE	47.0														
STANISLAUS RIVER															
Total			1413	754	45	18	1	2596	79	6785	8131	9929	7982	5435	43170
Average cubic feet per second			23	13	1	0	0	42	1	110	137	161	130	91	60
Monthly use in percent of seasonal			3.3	1.8	.1	0	0	6.0	.2	15.7	18.8	23.0	18.5	12.6	

a Includes an undetermined amount of water returned to river by spill.
b Formerly listed as Thomas Lyon.
c Oakdale Irrigation District for season of 1963 maintained plants at miles 37.7L and 39.1L to supplement district gravity supply.

TABLE B-93

DIVERSIONS - TULE RIVER
October 1962 through September 1963

Water User	Mile and Bank *	Number and Size of Pump	Monthly Diversion in Acre-Feet												Total Diversion Oct - Sept. Acre Feet
			Oct.	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	
SUCCESS DAM	0.0														
GAGING STATION - TULE RIVER BELOW SUCCESS DAM	0.35														
Campbell-Moreland Ditch	a 2.4L	Gravity	422	519	714	719	797			788	1684	1043	1305	853	8834
PORTER SLOUGH	2.4R														
GAGING STATION - PORTER SLOUGH AT PORTERVILLE (B LANE BRIDGE)	** (2.4)														
PIONEER SPILL	** (3.7R)														
Porter Slough Ditch b	** (4.5R)	Gravity				11	512		5	337	669	870	518	205	3127
GAGING STATION - PORTER SLOUGH NEAR PORTERVILLE (NEWCOMB ROAD)	** (6.1)														
Vandalia Ditch	c 3.1L	Gravity				17	228			125	176	391	65	215	1217
SANTA FE RAILROAD BRIDGE	5.1														
Poplar Ditch	d 5.8L	Gravity		41	43	38	2541	676		588	1507	4558	5939	2141	18070
STATE HIGHWAY 190 BRIDGE	5.9														
SOUTHERN PACIFIC RAILROAD BRIDGE	6.0														
Hubbs-Miner Ditch	e 6.4R	Gravity					169	122		407	590	851	483	793	3415f
STATE HIGHWAY 65 BRIDGE	6.6														
Rhodes-Fine Ditch	g 8.4L	Gravity							156	1120	872	115			2303h
OLIVE AVENUE BRIDGE	9.9														
FRIANT-KERN CANAL CROSSING	10.5														
Woods-Central Ditch	i 11.0L	Gravity				24	3227					9483	2763		15500j
GAGING STATION - TULE RIVER BELOW PORTERVILLE	11.8														
OTTLE BRIDGE	14.4														
TULE RIVER															
Total			422	560	757	809	7474	798	161	3355	5498	17350	11070	4207	52470
Average cubic feet per second			7	9	12	13	135	13	3	55	92	282	180	71	72
Monthly use in percent of seasonal			2.7	1.1	1.4	1.5	14.2	1.5	0.3	6.4	10.5	33.1	21.1	7.8	

* Mileage downstream from Success Dam

** Figure in parentheses indicates distance along Porter Slough from Tule River

a Flow measured at gaging station on Campbell-Moreland Ditch located approximately 2600 feet below head.

b Flow measured at gaging station on Porter Slough Ditch located approximately 150 feet below head.

c Flow measured at gaging station on Vandalia Ditch located approximately 1000 feet below head. The greater portion of this water was used to recharge Vandalia Irrigation District well field.

d Flow measured at gaging station on Poplar Ditch located approximately 4750 feet below head.

e Flow measured at gaging station on Hubbs-Miner Ditch located approximately 3400 feet below head.

f The recorder at this station was deactivated during the following periods: 10-1-62 through 2-1-63 and 2-6-63 through 2-10-63. This recorder was activated prior to anticipated diversion periods upon notification from the Tule River Association. It is assumed there was no flow during these deactivated periods.

g Flow measured at gaging station on Rhodes-Fine Ditch located approximately 3100 feet below head.

h The recorder at this station was deactivated during the following periods: 10-1-62 through 2-11-63, 3-6-63 through 4-17-63, and 8-1-63 through 9-30-63. This recorder was activated prior to anticipated diversion periods upon notification from the Tule River Association. It is assumed there was no flow during these deactivated periods.

i Flow measured at gaging station on Woods-Central Ditch located approximately 100 feet below head.

j The recorder at this station was deactivated during the following periods: 10-1-62 through 1-30-63, 2-26-63 through 6-22-63, and 8-16-63 through 9-30-63. This recorder was activated prior to anticipated diversion periods upon notification from the Tule River Association. It is assumed there was no flow during these deactivated periods.

TABLE B-94

DIVERSIONS AND ACREAGE IRRIGATED-EAST SIDE CANALS AND IRRIGATION DISTRICTS*
October 1962 through September 1963

Water User	Oct	Nov	Dec	Jan	Feb	Mar	Apr.	May	June	July	Aug	Sept	Total	Acreage Irrigated: General	Acreage Irrigated: Rice
Friant-Kern Canal						SAN JOAQUIN RIVER									
Total acre-feet diverted	54154	22471	0	1083	61071	74279	163174	221468	243915	237905	260352	173113	1512990		
Average cubic feet per second	881	378	0	18	1100	1208	2742	3602	4099	3869	4234	2909	2090		
Monthly use in percent of seasonal	3.6	1.5	0	0.1	4.0	4.9	10.8	14.6	16.1	15.7	17.2	11.4			
Madera Canal															
Total acre-feet diverted	409	101	0	0	1375	6912	12672	31321	53873	65716	65088	33142	270609		
Average cubic feet per second	7	2	0	0	25	112	213	509	905	1069	1059	557	371		
Monthly use in percent of seasonal	0.2	0	0	0	0.5	2.6	4.7	11.6	19.9	24.3	24.1	12.2			
Merced Irrigation District						MERCED RIVER									
Main Canal	0	300	310	310	280	23070	35786	85124	104612	104222	92221	65993	512228		
Northside Canal	490	63	63	111	34	776	345	2932	4227	4618	4485	3529	21673		
Total acre-feet diverted	490	363	373	421	314	23846	36131	88056	108839	108840	96706	69522	533901 a	100284 b	5366
Average cubic feet per second	8	6	6	7	6	388	607	1432	1829	1770	1573	1168	737		
Monthly use in percent of seasonal	0.1	0.1	0.1	0.1	0	4.4	6.8	16.5	20.4	20.4	18.1	13.0			
Turlock Irrigation District						TUOLUMNE RIVER									
Total acre-feet diverted	32610	26297	6224	10199	714	24188	30250	87152	104073	102506	96516	53976	574705 c	171008 d	0
Average cubic feet per second	530	442	101	166	13	393	508	1417	1749	1667	1570	907	794		
Monthly use in percent of seasonal	5.7	4.6	1.1	1.8	0.1	4.2	5.2	15.2	18.1	17.8	16.8	9.4			
Modesto Irrigation District															
Total acre-feet diverted	19736	6776	32	110	0	15734	26421	50692	66643	56625	43924	38185	324878 e	66028 f	437
Average cubic feet per second	321	114	1	2	0	256	444	824	1120	921	714	642	449		
Monthly use in percent of seasonal	6.1	2.1	0	0	0	4.9	8.1	15.6	20.5	17.4	13.5	11.8			
Waterford Irrigation District															
Total acre-feet diverted	1973	0	0	0	0	11	1072	5714	7182	7348	6391	4912	34603 g	7232 h	
Average cubic feet per second	32	0	0	0	0	0	18	93	121	120	104	83	48		
Monthly use in percent of seasonal	5.7	0	0	0	0	0	3.1	16.5	20.8	21.2	18.5	14.2			
Oakdale Irrigation District						STANISLAUS RIVER									
Northside Canal	5669	130	17	47	0	486	437	18185	23796	21040	20644	17053	107504	19938 i	3221
Southside Canal	8009	404	60	0	0	1079	42	28201	32522	29601	29182	23885	152985	33869 j	416
Total acre-feet diverted	13678	534	77	47	0	1565	479	46386	56318	50641	49826	40938	260489	53807 k	3637
Average cubic feet per second	222	9	1	1	0	25	8	754	946	824	810	688	360		
Monthly use in percent of seasonal	5.3	0.2	0	0	0	0.6	0.2	17.8	21.6	19.5	19.1	15.7			
South San Joaquin Irrigation District															
Total acre-feet diverted	8703	0	0	0	0	5207	5888	34683	40937	45236	41288	28321	210263	63666 m	
Average cubic feet per second	142	0	0	0	0	85	99	564	688	736	671	476	290		
Monthly use in percent of seasonal	4.1	0	0	0	0	2.5	2.8	16.5	19.5	21.5	19.6	13.5			

* Data for Madera and Friant-Kern Canal furnished by USBR, all other data furnished by individual irrigation districts.
a An additional 83,209 acre-feet of water was pumped from wells.
b Of this acreage, 2,080 was double cropped. It does not include an undetermined amount of riparian water users acreage.
c An additional 114,120 acre-feet of water was pumped from wells.
d Of this acreage, 15,891 was double cropped.
e An additional 39,470 acre-feet of water was pumped from wells.
f Of this acreage, 10,666 was double cropped.
g An additional 506 acre-feet of water was pumped from wells.
h Of this acreage, 209 was double cropped.
i Of this acreage, 274 was double cropped.
j Of this acreage, 608 was double cropped.
k This acreage also received 32,231 acre-feet of water from wells and controlled drainage.
m This acreage also received an undetermined amount of well water, and an undetermined amount of controlled drainage water from Oakdale Irrigation District. Of this acreage, 3,284 was double cropped. Includes 1,935 acres served by subirrigation.

TABLE B-95

DELIVERIES FROM CENTRAL VALLEY PROJECT CANALS *
October 1962 through September 1963

Water User	Mile Post from Canal Head From	To	Monthly Deliveries in Acre-Feet Oct.	Nov	Dec	Jan.	Feb	Mar	Apr.	May	June	July	Aug	Sept.	Total
							Delta-Mendota Canal								
State of California (South Bay Aqueduct)	3.54		1571	1320	0	620	86	1148	0	645	1539	1407	2205	2392	12933
Plain View Water District	8.50	20.00	425	141	1	5	54	1089	118	2861	2809	3256	3176	1930	15865
West Side Irrigation District	14.78		0	0	0	0	0	98	0	336	204	827	327	212	2004
Banta-Carbona Irrigation District	20.42		0	0	0	0	0	0	0	1530	1331	1739	1747	654	7001
Hospital Water District	18.05	30.96	359	194	3	1	3	2009	631	2932	4375	4131	3598	2689	20925
West Stanislaus Irrigation District	31.31		0	0	0	0	0	0	0	406	715	5778	6977	1124	15000
Kern Canon Water District	31.31	35.18	136	129	13	4	0	401	151	1039	1198	1276	1592	636	6575
Del Puerto Water District	35.73	42.08	217	527	47	0	1	716	94	1209	2405	1996	2138	1238	10588
Patterson Water District	42.51		174	25	8	0	0	0	268	806	895	891	1285	1079	5431
Salado Water District	42.10	46.83	116	41	0	0	0	215	0	1156	1408	2034	1131	514	6615
Sunflower Water District	44.23	52.02	140	30	0	13	0	541	188	1073	2005	2458	1903	549	8900
Orestimba Water District	46.83	51.41	40	2	8	1	1	330	30	1181	1943	3176	1631	429	8772
Foothill Water District	51.65	57.46	208	1	1	1	0	632	0	915	1393	2083	1563	1387	8184
Davis Water District	53.60	56.82	128	31	0	0	0	73	33	304	412	599	578	415	2573
Luhr and Wendt			0	0	0	0	0	5	4	6	6	9	13	10	53
Mustang Water District	56.80	62.67	131	46	6	0	0	322	36	644	972	1626	1063	625	5471
Quinto Water District	63.96	67.55	129	60	0	0	0	160	0	278	511	844	811	714	3507
Romero Water District	66.70	68.03	390	100	50	0	0	145	0	181	291	489	545	128	2319
San Luis Water District	69.21	90.53	2246	1606	675	928	4414	4265	5026	6130	10574	12698	9507	3350	61419
Grassland Water District	70.00		9916	4341	54	0	0	0	0	796	899	762	402	1114	18284
Grassland Water District (1)	Mendota Pool		18925	5648	0	0	0	0	0	0	0	0	0	2759	27332
Morrison-Knudsen			0	0	0	0	0	0	0	0	0	0	0	1	1
State Fish and Game	70.00		0	0	0	0	0	0	0	0	0	0	0	0	0
Sam Hamburg Farms	90.53		1	2	1	3	1	2	1	2	3	4	3	2	25
Panoche Water District	93.25	96.70	2153	2983	1470	1175	7264	7649	2710	4676	10665	12664	10993	3329	67731
Eagle Field Water District	93.27	94.57	33	192	43	132	517	98	160	1242	1229	1451	1270	564	6931
Oro Loma Water District	95.50	96.62	0	0	0	0	0	0	666	1156	933	1130	961	97	4943
Westside Golf Association	95.95		14	12	2	5	3	9	8	13	17	22	20	15	140
McNamara-Mannix			0	0	0	0	0	0	33	49	51	53	33	34	253
Mercy Springs Water District	97.70	99.82	0	0	0	0	0	216	137	1213	1187	1119	733	220	4825
Mercy Springs Water District (1)	Pool		0	0	0	0	0	0	0	0	0	0	0	0	0
Widren Water District	102.03		0	0	0	0	0	35	113	506	439	438	478	124	2133
Broadview Water District	102.95		284	1209	849	428	1911	1575	585	1344	2262	3271	2479	1058	17255
Total			37736	18640	3231	3316	14255	21733	10992	34629	52671	68231	59162	29392	353988
Net Deliveries DMC to Mendota Pool			45629	26244	5044	13734	23909	83185	56247	124074	143078	174944	163008	82665	941761
							Millerton Lake								
Fresno County Water District #18			[illegible]	2	2	2	2	2	2	8	14	18	16	11	84
Ralston Association			[illegible]	1	1	1	1	1	1	1	1	2	2	1	13
Total			5	3	3	3	3	3	3	9	15	20	18	12	97
							Madera Canal								
Madera Irrigation District	6.10	32.2	0	0	0	0	1006	5697	7750	17274	31861	38954	36861	20261	159664
Adobe Ranch	20.6		0	54	0	0	0	0	0	0	0	0	0	0	54
Chowchilla Water District	35.9		0	0	0	0	0	77	4104	12341	22882	26458	26809	1327[illegible]	105943
Total			0	54	0	0	1006	5774	11854	29615	54743	65412	63670	3353[illegible]	265661

TABLE B-95

DELIVERIES FROM CENTRAL VALLEY PROJECT CANALS (Continued)*
October 1962 through September 1963

Water User	Mile Post from Canal Head From To	Oct.	Nov	Dec.	Jan	Feb.	Mar	Apr	May	June	July	Aug	Sept	Total
						Friant-Kern Canal								
Garfield Water District	7.53	108	[illegible]5	20	[illegible]	71	92	18	296	668	571	462	274	[illegible]
International Water District	14.9	18	0	0	0	0	0	0	52	147	180	187	116	[illegible]
Round Mountain Water District	20.85 21.33	21	0	0	0	0	0	0	0	0	29	34	38	122
Round Mountain Ranch	20.22	13	4	0	0	0	0	0	7	16	16	8	10	74
Consolidated Irrigation District	28.50	0	0	0	0	0	0	10820	16096	9900	10000	17278	0	64094
Last Chance Water Ditch Company	28.50	0	0	0	0	0	0	635	1865	1000	0	0	0	3500
Laguna Irrigation District	28.50	0	0	0	0	0	0	1460	3540	2001	0	0	0	7001
Corcoran Irrigation District	28.50	0	0	0	0	0	0	8440	3160	2001	0	0	5383	18984
Stratford Irrigation District	28.50	0	0	0	0	0	0	200	300	0	0	0	0	500
Tulare Lake Basin Water Storage District	28.50 95.64	0	0	0	0	0	0	4358	16284	4001	8000	4479	26523	63645
Alta Irrigation District	28.50	0	0	0	0	0	0	2101	901	601	0	0	0	3603
Fresno Irrigation District	28.50	0	0	0	0	3836	0	17994	1226	2711	1861	18821	6179	52628
Riverdale Irrigation District	28.50	0	0	0	0	0	0	1460	3540	2501	0	0	0	7501
Kings River Water Association	28.50	0	0	0	0	0	0	0	0	0	0	0	0	[illegible]
Westside Irrigation District	28.50	0	0	0	0	0	0	1200	1800	0	0	0	0	300[illegible]
Kings County Water District	28.50 71.29	0	0	0	0	0	0	12966	8536	3132	5873	9656	345	40508
Orange Cove Irrigation District	35.87 53.31	1373	885	0	0	0	52	20	1950	5361	6881	7198	3669	27389
City of Orange Cove	43.44	23	3	0	0	0	0	0	30	36	38	35	26	191
Stone Corral Irrigation District	56.90 64.40	260	151	0	0	0	65	46	434	1408	1910	1757	843	6874
Ivanhoe Irrigation District	65.04 68.13	1010	674	0	0	0	12	157	1375	1644	2634	3402	2491	13399
Tulare Irrigation District	68.14 71.29	3051	2001	0	0	18631	0	23241	24151	39454	39228	19250	26793	195800
Lakeside Irrigation Water District	69.42	0	0	0	0	0	0	1628	4873	8420	280	5000	0	20201
Kaweah-Delta Water Conservation District	69.08 71.29	0	0	0	0	0	0	11558	18403	10193	0	7468	2283	49905
Exeter Irrigation District	72.52 79.24	1523	1186	0	0	409	353	422	3136	4407	4860	4324	232[illegible]	22941
Lindsay-Strathmore Irrigation District	85.56	2588	2164	0	0	50	353	417	2674	3781	4441	4471	347[illegible]	24418 (2)
Lindmore Irrigation District	[illegible].17 91.12	2951	1730	0	0	1549	1954	369	4655	8589	10344	9812	5542	47195
Porterville Irrigation District	93.93 98.62	500	545	0	0	922	1825	807	2275	3070	3584	3995	1882	19405
Lower Tule Irrigation District	95.67 98.62	19295	8398	0	0	8313	17635	27166	49088	49342	38625	49558	40392	[illegible]812
Tea Pot Dome	99.35	407	220	0	0	26	22	2	442	609	680	672	51[illegible]	3590
Saucelito Irrigation District	93.62 107.37	1956	579	0	0	1817	4364	2075	4395	8247	9231	9459	5123	47296
Cloer Commercial Service District	101.60	0	0	0	0	0	0	16	0	0	0	0	0	16
Terra Bella Irrigation District	102.65	994	524	0	0	0	28	0	1158	1603	2210	2297	1595	10409
Pixley Irrigation District	102.69	3039	0	0	0	4320	0	2692	4261	6583	10277	10352	6407	47931
Delano-Earlimart Irrigation District	109.48 118.45	7765	5399	224	0	6748	18813	11054	16027	25240	33329	28991	[illegible]	[illegible]404
Rag Gulch Water District	117.96	430	264	141	0	910	0	891	1327	14[illegible]	1343	1[illegible]96	488	9148
Southern San Joaquin Municipal Utility District	117.44 127.97	3554	3082	555	0	2698	20567	8404	9269	13222	29943	258[illegible]9	9426	[illegible]31
Shafter-Wasco Irrigation District	134.42 137.17	1640	1190	532	0	930	7147	2150	2257	5742	10719	1014[illegible]	4062	46509
Pacific Gas & Electric Company	150.83	0	0	0	[illegible]	0	0	0	0	0	0	0	[illegible]	[illegible]
Rosedale Rio Bravo Water Storage District	151.0	0	0	0	0	0	0	4019	5889	6000	0	0	[illegible]	[illegible]90[illegible]
Buena Vista Water Storage District	151.80	0	0	0	0	0	0	2358	3800	9199	18[illegible]5	0	2501	19663
TOTAL		52519	29074	1472	0	51230	73282	161144	219472	242287	238892	256811	170[illegible]1[illegible]	[illegible]

* Data furnished by the U. S. Bureau of Reclamation.

(1) Delta-Mendota Canal water delivered via Delta-Mendota Pool.
(2) Includes water transported from Wutchumna Ditch.

APPENDIX C

GROUND WATER MEASUREMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF PLATES

(Bound at end of volume)

INTRODUCTION

This appendix presents ground water measurement data for the period July 1, 1962 through June 30, 1963.

The area for which ground water level measurements of selected wells are shown on Table C-1 is designated as Area 4 on page iii. Area 4 is that portion of the Water Pollution Control Board Region 5, which includes the Stanislaus River drainage area and the area south, to the Tehachapi Mountains.

The department cooperates with U. S. Geological Survey and the U. S. Bureau of Reclamation and many local agencies for the systematic observation of ground water levels. Wells for which water level measurements are collected in the San Joaquin Valley Hydrologic area number approximately 7,500 of which nearly 600 are presented here. These 600 wells were selected as representative wells of all the wells measured in the area, and are designated as selected wells. These wells were selected on the basis of a number of factors such as areal distribution; length of water level record; frequency of measurements; conformity with respect to water level fluctuations in the ground water basin or area, in a confined aquifer, or in a zone of shallow depth; and availability of a log, mineral analyses, and production records.

The depth to water in most wells is usually a direct measurement made with a tape; however, in some wells, especially deep ones, measurements are made with an air line and gage or an electric sounder.

Forty-six ground water basins or areas in the San Joaquin Valley are shown on Plates C-1 and C-2.

The districts or areas with a ground water level change of five feet or more in the unconfined and semiconfined aquifers are also shown on Plate C-1. The districts or areas with a ground water level change of five feet or more in the confined aquifers are shown on Plate C-2.

A map showing the location of the selected wells as listed in Table C-1 is presented on Plate C-3.

Outlined on Plate C-4 is the Poso Soil Conservation District Cooperative Ground Water Program area.

Presented on Plate C-5 is that portion of Kern County covered in the Kern County cooperative ground water program for that area.

Definitions

Free ground water - Water in the interconnected interstices in the zone of saturation down to the impervious barrier, moving under the control of the water-table slope.

Confined ground water - A body of ground water overlain by material sufficiently impervious to sever free hydraulic connections with overlying ground water except at the intake. Confined water moves in conduits under pressure due to difference in head between intake and discharge areas of the confined water body.

Pressure surface - Or piezometric surface is the level to which the water level will rise above the bottom of a confining bed of impervious material when penetrated.

Perched ground water - Ground water occurring in a saturated zone separated from the main body of ground water by unsaturated material.

Water table - On pervious granular material the water table is the upper surface of the body of free water which completely fills all openings in the material sufficiently pervious to permit percolation. On fractured impervious rocks and in solution openings, it is the surface at the contact between the water body in the openings and the overlying ground air.

A map of 19 historic ground water areas and profiles along a section showing water levels in 1921, 1951, 1962, and 1963 are presented on Plate C-6.

Unit hydrographs depicting the fluctuation of average water levels in the 19 historic ground water areas in the San Joaquin Valley are presented on Plate C-7.

Water level fluctuations are depicted graphically on hydrographs for 35 selected wells distributed among significant basins and areas in the San Joaquin Valley. The hydrographs are presented on Plate C-8 by region, basin, or area, and well number.

Presented on Plate C-9 is a map showing lines of equal elevation of water in wells, San Joaquin Valley, Spring 1963.

RECORDS OF GROUND WATER LEVELS AT WELLS IN THE SAN JOAQUIN VALLEY

Explanation of Headings and Symbols Used in Columns in Table C-1

State Well Number--The well numbering system used in this report is based on the township, range, and section subdivision of the Public Land Survey. It conforms to the system used in all ground water investigations and for numbering all wells for which data are published or filed by the Department of Water Resources. In this report the number, which is assigned to a well in accordance with this system, is referred to as the "State" well number.

Under the system, each section is divided into 40-acre tracts lettered as follows:

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Wells are numbered within each 40-acre tract according to the chronological sequence in which they have been assigned State Well Numbers. For example, a well which has the number 16S/15E-17K1 M would be in Township 16 South, Range 15 East, Section 17, M.D.B. & M., and would be further located as the first well assigned a State Well Number in Tract K. In this report, well numbers are referenced to the Mount Diablo Base and Meridian (m) or the San Bernardino Base and Meridian (S).

Ground surface elevation--The numbers in this column give the elevation in feet above mean sea level (U.S.G.S. datum).

Date--The date shown in this column is the date upon which the depth measurement given in the next column was made.

Ground surface to water surface in feet--This is the measured depth in feet from the ground surface to the water surface in the well. Certain of the depth measurements in the column may be followed with an asterisk superscript to indicate a questionable measurement. Depth to ground water measurements may be questionable for such reasons as (a) well being pumped while undergoing measurement, (b) nearby pump operating, (c) casing leaking or wet, (d) well pumped recently, (e) air gage measurement, (f) recharge operation at well or nearby. The specific reason for any asterisk on any given measurement may be obtained through the San Joaquin Valley Branch Office of the Department of Water Resources.

Other code symbols used in this column are as follows:

¤ - No measurement

≑ - Measurement discontinued

@ - Well has been destroyed

The words FLOW and DRY are shown in this column to indicate a flowing or dry well, respectively.

The word DISCONTINUED indicates records from this well will no longer be published.

Water surface elevation--This is the elevation in feet above mean sea level (U.S.G.S. datum) of the water surface in the well. It was derived by machine computation by subtraction of the depth measurement from the reference point elevation.

Agency supplying data--The numbers in this column are the code numbers for the agencies supplying water level data. The agency code consists of a five-digit number, the first of which is a region number. Thus, 54200 refers to agency 4200 in Region 5. Because of the limitations of punch-card space, the agency code has been shown as a four-digit number without the region number.

The first digit of the four-digit agency code designates the type of well numbering system used by the agency as follows:

Code	Well Numbering System
4	Local numbers
5	State or U. S. G. S.
6	U. S. B. R.
7	South San Joaquin Irrigation District
8	Kern County Land Company

The last three digits of the agency code are numbers that designate, within specified serial limits, the type of agency from which the data were obtained, as follows:

Code	Type of Agency
000-049	Federal
050-099	State
100-199	County
200-399	Municipal
400-699	District--Water, Irrigation, Conservation, etc.
700-999	Private

In the Central Valley Region, the agency code for districts is further broken down to the geographic areas, as follows:

Code	Area in Central Valley Region
500-599	American River to San Joaquin River
600-699	San Joaquin River to Tehachapi Mountains

In this list of water levels, the agency furnishing the measurement is listed. The agencies and code numbers assigned to them are as follows:

Agency Code	Agency
4200	City of Fresno
4520	Oakdale Irrigation District
4521	Modesto Irrigation District
4524	Turlock Irrigation District
4525	Merced Irrigation District
4636	Consolidated Irrigation District
4637	Alta Irrigation District
4640	Buena Vista Water Storage District

Agency Code	Agency
5000	U. S. Geological Survey
5050	Department of Water Resources
5120	Kern County Surveyor
5529	Poso Soil Conservation District
5631	Fresno Irrigation District
6001*	U. S. Bureau of Reclamation
7518	South San Joaquin Irrigation District
8700	Kern County Land Company

*A large amount of data listed under this agency code has been gathered by irrigation and water districts and compiled by the Bureau of Reclamation for transmittal to the Department of Water Resources.

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN JOAQUIN VALLEY			5-22.00		
SO SAN JOAQUIN IRRIGATION DIST			5-22.05		
1S/07E-15J01 M	42.0	1-26-63	9.3	32.7	7518
2S/07E-12R01 M	55.0	1-03-62	14.5	40.5	5050
		2-02-62	14.7	40.3	
		3-05-62	14.5	40.5	
		4-03-62	14.1	40.9	
		5-03-62	14.7	40.3	
		6-06-62	14.2	40.8	
		7-05-62	14.3	40.7	
		8-06-62	14.4	40.6	
		9-05-62	14.3	40.7	
		10-04-62	14.3	40.7	
		11-05-62	14.4	40.6	
		12-05-62	14.2	40.8	
		1-07-63	13.7	41.3	
		2-14-63	13.0	42.0	
		3-01-63	13.0	42.0	
		4-03-63	14.1	40.9	
		5-03-63	12.7	42.3	
		6-03-63	13.1	41.9	
2S/07E-12R02 M	55.0	1-03-62	12.2	42.8	5050
		2-02-62	12.3	42.7	
		3-05-62	11.5	43.5	
		4-03-62	11.0	44.0	
		5-03-62	10.3	44.7	
		6-06-62	10.4	44.6	
		7-05-62	10.5	44.5	
		8-06-62	10.4	44.6	
		9-05-62	10.9	44.1	
		10-04-62	11.2	43.8	
		11-05-62	11.5	43.5	
		12-05-62	11.8	43.2	
		1-07-63	11.9	43.1	
		2-14-63	10.8	44.2	
		3-01-63	11.8	43.2	
		4-03-63	11.4	43.6	
		5-03-63	10.7	44.3	
		6-03-63	10.8	44.2	
2S/09E-08H01 M	112.0	7-01-62	□		7518
		7-02-62	#		

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR. TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
OAKDALE IRRIGATION DISTRICT			5-22.06		
1S/09E-16J01 M	119.0	10-31-61	59.8	59.2	4520
		3-01-62	58.0	61.0	
		12-05-62	58.0	61.0	
		1-02-63	56.2	62.8	
		2-01-63	55.8	63.2	
		3-01-63	55.9	63.1	
		4-01-63	55.8	63.2	
		5-01-63	55.6	63.4	
		6-01-63	57.8	61.2	
1S/09E-36A01 M	145.0	12-13-62	50.9	94.1	4520
		1-03-63	50.8	94.2	
		1-17-63	50.9	94.1	
		2-03-63	51.0	94.0	
		2-15-63	51.2	93.8	
		3-01-63	51.2	93.8	
1S/10E-19L01 M	146.5	10-31-61	59.3	87.2	4520
		3-02-62	57.1	89.4	
		12-05-62	57.1	89.4	
		1-02-63	52.6	93.9	
		2-01-63	52.6	93.9	
		3-01-63	52.8	93.7	
		4-01-63	52.8	93.7	
		5-01-63	52.8	93.7	
		6-01-63	52.0	94.5	
1S/10E-28J01 M	193.0	12-05-62	87.5	105.5	4520
		1-03-63	86.4	106.6	
		1-17-63	86.2	106.8	
		2-03-63	86.0	107.0	
		2-15-63	86.1	106.9	
		3-01-63	85.8	107.2	
2S/09E-26F01 M	132.0	12-05-62	52.5	79.5	4520
		1-03-63	52.2	79.8	
		1-17-63	52.7	79.3	
		2-03-63	52.8	79.2	
		2-15-63	51.7	80.3	
		3-01-63	52.0	80.0	
		3-28-63	52.8	79.2	
		4-29-63	51.8	80.2	
		6-01-63	□		
2S/10E-04H01 M	185.5	10-31-61	85.3	100.2	4520

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
OAKDALE IRRIGATION DISTRICT			5-22.06		
2S/10E-04H01 M CONT.	185.5	11-16-61	83.9	101.6	4520
		12-04-61	83.0	102.5	
		12-18-61	82.2	103.3	
		1-02-62	81.6	103.9	
		1-16-62	81.4	104.1	
		2-01-62	81.2	104.3	
		2-15-62	81.0	104.5	
		3-02-62	80.7	104.8	
		12-05-62	77.7	107.8	
		1-03-63	77.2	108.3	
		2-01-63	77.3	108.2	
		3-01-63	77.3	108.2	
		4-01-63	77.3	108.2	
		5-01-63	77.2	108.3	
		6-01-63	78.0	107.5	
2S/10E-33J01 M	165.0	12-12-62	61.6	103.4	4520
		1-03-63	61.2	103.8	
		1-17-63	61.3	103.7	
		2-03-63	61.2	103.8	
		2-15-63	61.1	103.9	
		3-01-63	61.2	103.8	
2S/11E-29B01 M	218.0	10-31-61	102.9	115.1	4520
		3-02-62	96.7	121.3	
		12-05-62	94.5	123.5	
		1-03-63	94.5	123.5	
		2-01-63	93.1	124.9	
		3-01-63	93.3	124.7	
		4-01-63	93.0	125.0	
		5-01-63	92.7	125.3	
		6-01-63	94.5	123.5	
2S/11E-31N01 M	192.0	12-01-62	79.6	112.4	4520
		3-01-63	78.8	113.2	
2S/12E-31K01 M	190.0	12-01-62	45.5	144.5	4520
		3-01-63	45.0	145.0	
3S/10E-15A01 M	152.0	12-05-62	52.7	99.3	4520
		1-03-63	52.3	99.7	
		1-17-63	51.7	100.3	
		2-03-63	51.5	100.5	
		2-15-63	51.1	100.9	
		3-01-63	51.0	101.0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
OAKDALE IRRIGATION DISTRICT			5-22.06		
3S/10E-15A01 M CONT.	152.0	3-28-63	50.9	101.1	4520
		4-29-63	50.4	101.6	
		6-01-63	52.7	99.3	
3S/11E-18D01 M	162.0	12-12-62	57.0	105.0	4520
		1-03-63	56.4	105.6	
		1-17-63	56.4	105.6	
		2-03-63	56.2	105.8	
		2-15-63	56.0	106.0	
		3-01-63	56.0	106.0	
MODESTO IRRIGATION DISTRICT			5-22.07		
2S/08E-25P01 M	97.2	11-01-62	36.2	61.0	4521
		3-01-63	38.2	59.0	
2S/09E-31G01 M	100.3	11-01-62	33.2	67.1	4521
		3-01-63	31.9	68.4	
3S/08E-22C01 M	64.0	7-05-62	17.8	46.2	5050
		8-06-62	17.6	46.4	
		9-05-62	18.3	45.7	
		10-04-62	17.9	46.1	
		11-05-62	17.8	46.2	
		12-05-62	18.2	45.8	
		1-07-63	15.5	48.5	
		2-13-63	14.7	49.3	
		3-01-63	14.6	49.4	
		4-03-63	15.3	48.7	
		5-06-63	14.5	49.5	
		6-05-63	14.2	49.8	
3S/08E-22C02 M	64.0	7-05-62	14.0	50.0	5050
		8-06-62	13.5	50.5	
		9-05-62	14.9	49.1	
		10-04-62	15.7	48.3	
		11-05-62	15.9	48.1	
		12-05-62	15.8	48.2	
		1-07-63	14.4	49.6	
		2-13-63	13.9	50.1	
		3-01-63	14.0	50.0	
		4-03-63	13.3	50.7	
		5-06-63	13.2	50.8	
		6-05-63	13.0	51.0	
3S/08E-24C01 M	74.0	11-01-62	23.2	50.8	4521

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MODESTO IRRIGATION DISTRICT			5-22.07		
3S/08E-24C01 M CONT.	74.0	3-01-63	21.6	52.4	4521
3S/09E-05N01 M	92.5	11-01-62	24.5	68.0	4521
		3-01-63	24.9	67.6	
3S/09E-21A02 M	95.0	11-01-62	33.8	61.2	4521
		3-01-63	33.5	61.5	
3S/09E-30P01 M	82.5	11-01-62	39.6	42.9	4521
		3-01-63	38.0	44.5	
3S/1CE-06G01 M	133.1	11-01-62	36.3	96.8	4521
		3-01-63	36.2	96.9	
3S/10E-29K01 M	119.2	11-01-62	45.5	73.7	4521
		3-01-63	46.5	72.7	
3S/10E-32G01 M	123.0	11-01-62	57.6	65.4	4521
		3-01-63	56.6	66.4	
4S/08E-03E01 M	63.0	11-01-62	16.4	46.6	4521
		3-01-63	17.0	46.0	
TURLOCK IRRIGATION DISTRICT			5-22.08		
4S/08E-27D01 M	55.0	3-01-63	10.4	44.6	4524
4S/09E-21A01 M	82.0	3-01-63	15.0	67.0	4524
4S/10E-21R01 M	109.0	3-01-63	12.5	96.5	4524
4S/10E-21R02 M	109.0	12-00-62	14.7	94.3	4524
4S/11E-29N01 M	131.0	3-01-63	12.5	118.5	4524
4S/11E-32P01 M	130.0	12-00-62	23.6	106.4	4524
5S/08E-01N01 M	53.0	3-01-63	5.7	47.3	4524
5S/08E-C2R01 M	50.0	12-00-62	8.5	41.5	4524
5S/09E-C3D02 M	70.0	7-05-62	6.9	63.1	5050
		8-06-62	7.1	62.9	
		9-06-62	4.9	65.1	
		10-04-62	5.0	65.0	
TURLOCK IRRIGATION DISTRICT			5-22.08		
5S/09E-03D02 M CONT.	70.0	11-01-62	6.2	63.8	5050
		12-05-62	8.7	61.3	
		1-07-63	7.1	62.9	
		2-14-63	5.8	64.2	
		3-06-63	6.5	63.5	
		4-02-63	6.6	63.4	
		5-14-63	5.8	64.2	
		6-04-63	5.5	64.5	
5S/09E-14R01 M	75.0	7-03-62	5.7	69.3	4524
		8-02-62	5.8	69.2	
		9-05-62	6.4	68.6	
		10-02-62	7.0	68.0	
		11-01-62	7.6	67.4	
		12-04-62	7.7	67.3	
		1-03-63	7.6	67.4	
		2-01-63	7.4	67.6	
		3-05-63	5.7	69.3	
		4-02-63	6.0	69.0	
		5-02-63	6.5	68.5	
		6-04-63	6.8	68.2	
5S/09E-22N01 M	63.0	12-00-62	8.6	54.4	4524
5S/09E-24N01 M	75.0	7-03-62	5.9	69.1	4524
		8-02-62	4.8	70.2	
		9-05-62	6.6	68.4	
		10-02-62	6.4	68.6	
		11-01-62	6.8	68.2	
		12-04-62	7.1	67.9	
		1-03-63	7.8	67.2	
		2-01-63	6.6	68.4	
		3-05-63	5.3	69.7	
		4-02-63	6.5	68.5	
		5-02-63	6.9	68.1	
		6-04-63	4.9	70.1	
5S/10E-21001 M	90.0	12-00-62	12.0	78.0	4524
5S/10E-21R01 M	92.0	3-00-63	7.5	84.5	4524
5S/11E-21N01 M	125.0	3-00-63	6.3	118.7	4524
5S/11E-29F01 M	120.0	12-00-62	11.7	108.3	4524
5S/12E-31N01 M	150.0	12-00-62	45.5	104.5	4524

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
TURLOCK IRRIGATION DISTRICT			5-22.08		
6S/09E-15R01 M	60.0	3-01-63	5.5	54.5	4524
6S/10E-21A01 M	87.0	3-01-63	4.2	82.8	4524
6S/10E-21N01 M	84.0	12-00-62	6.9	77.1	4524
6S/11E-08R01 M	115.0	3-00-63	13.2	101.8	4524
6S/11E-09N01 M	118.0	12-00-62	8.6	109.4	4524
MERCED IRRIGATION DISTRICT			5-22.09		
6S/11E-34R01 M	111.3	7-03-62	6.8	104.5	4525
		7-31-62	7.5	103.8	
		9-06-62	7.7	103.6	
		10-03-62	8.1	103.2	
		10-30-62	6.0	105.3	
		12-04-62	7.4	103.9	
		1-08-63	7.2	104.1	
		2-05-63	7.1	104.2	
		3-05-63	6.8	104.5	
		4-02-63	7.8	103.5	
		5-02-63	5.8	105.5	
		6-03-63	@		
		6-04-63	#		
6S/12E-21N01 M	143.8	7-02-62	15.9	127.9	4525
		7-30-62	14.9	128.9	
		9-06-62	14.4	129.4	
		10-02-62	15.7	128.1	
		10-30-62	16.2	127.6	
		12-04-62	15.4	128.4	
		1-07-63	15.9	127.9	
		2-05-63	14.9	128.9	
		3-05-63	15.3	128.5	
		4-01-63	15.0	128.8	
		5-01-63	15.0	128.8	
		5-29-63	17.9	125.9	
		6-27-63	15.9	127.9	
6S/13E-19N01 M	180.7	7-30-62	14.8	165.9	4525
		9-05-62	14.8	165.9	
		10-02-62	16.0	164.7	
		10-29-62	15.5	165.2	
		12-04-62	16.1	164.6	
MERCED IRRIGATION DISTRICT			5-22.09		
6S/13E-19N01 M CONT.	180.7	1-08-63	16.7	164.0	4525
		2-04-63	11.0	169.7	
		3-04-63	14.3	166.4	
		4-01-63	15.1	165.6	
		5-01-63	14.7	166.0	
		5-29-63	13.1	167.6	
		6-27-63	14.6	166.1	
6S/14E-32N01 M	178.1	7-03-62	14.7	163.4	4525
		8-03-62	15.0	163.1	
		9-06-62	14.7	163.4	
		10-04-62	14.4	163.7	
		11-05-62	15.5	162.6	
		12-10-62	15.2	162.9	
		1-10-63	14.9	163.2	
		2-05-63	11.6	166.5	
		3-05-63	14.6	163.5	
		4-02-63	14.0	164.1	
		5-02-63	12.5	165.6	
		5-29-63	13.3	164.8	
		6-30-63	11.9	166.2	
7S/10E-01N01 M	90.7	3-05-63	9.8	80.9	4525
7S/11E-01H01 M	118.0	1-02-62	14.6	103.4	5050
		2-02-62	14.3	103.7	
		3-05-62	12.8	105.2	
		4-05-62	13.3	104.7	
		5-02-62	13.8	104.2	
		6-07-62	11.3	106.7	
		7-02-62	11.5	106.5	
		8-02-62	12.8	105.2	
		9-06-62	11.4	106.6	
		10-03-62	11.0	107.0	
		11-01-62	10.9	107.1	
		12-05-62	11.2	106.8	
		1-07-63	11.3	106.7	
		2-10-63	11.1	106.9	
		3-05-63	10.2	107.8	
		4-02-63	10.3	107.7	
		5-03-63	9.8	108.2	
		6-04-63	9.7	108.3	
7S/11E-13N01 M	106.6	7-03-62	8.6	98.0	4525
		7-30-62	8.0	98.6	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MERCED IRRIGATION DISTRICT			5-22.09		
7S/11E-13N01 M CONT.	106.6	9-06-62	9.2	97.4	4525
		10-03-62	8.1	98.5	
		10-30-62	7.0	99.6	
		12-04-62	7.3	99.3	
		1-07-63	7.2	99.4	
		2-05-63	6.3	100.3	
		3-05-63	5.2	101.4	
		4-02-63	5.2	101.4	
		5-02-63	8.2	98.4	
		6-03-63	8.6	98.0	
		6-30-63	8.7	97.9	
7S/12E-12R01 M	147.3	7-30-62	13.2	134.1	4525
		9-05-62	15.5	131.8	
		10-02-62	16.6	130.7	
		10-29-62	15.4	131.9	
		12-04-62	15.6	131.7	
		1-07-63	15.1	132.2	
		2-04-63	15.3	132.0	
		3-04-63	14.4	132.9	
		4-01-63	14.5	132.8	
		5-01-63	13.6	133.7	
		5-29-63	12.8	134.5	
		6-27-63	11.2	136.1	
7S/13E-16N01 M	152.1	7-30-62	12.0	140.1	4525
		9-05-62	11.7	140.4	
		10-02-62	16.9	135.2	
		10-29-62	11.4	140.7	
		12-03-62	11.8	140.3	
		1-08-63	12.7	139.4	
		2-04-63	12.8	139.3	
		3-04-63	11.3	140.8	
		4-01-63	11.5	140.6	
		5-01-63	11.2	140.9	
		5-29-63	12.0	140.1	
		6-27-63	14.2	137.9	
7S/14E-16R01 M	187.5	7-03-62	4.4	183.1	4525
		8-03-62	4.9	182.6	
		9-06-62	5.8	181.7	
		10-04-62	6.4	181.1	
		11-05-62	10.1	177.4	
		12-10-62	11.6	175.9	
		1-10-63	12.7	174.8	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MERCED IRRIGATION DISTRICT			5-22.09		
7S/14E-16R01 M CONT.	187.5	2-05-63	13.1	174.4	4525
		3-05-63	13.2	174.3	
		4-01-63	11.3	176.2	
		5-02-63	10.5	177.0	
		5-29-63	7.8	179.7	
		6-30-63	5.1	182.4	
7S/15E-36N01 M	234.2	7-02-62	DRY		4525
		7-30-62	DRY		
		9-06-62	DRY		
		10-02-62	DRY		
		10-30-62	DRY		
		11-04-62	DRY		
		12-04-62	DRY		
		1-07-63	DRY		
		2-05-63	DRY		
		3-05-63	DRY		
		4-01-63	DRY		
		5-01-63	DRY		
		5-29-63	DRY		
		6-27-63	DRY		
8S/12E-01D01 M	120.2	8-01-62	6.0	114.2	4525
		9-05-62	7.0	113.2	
		10-02-62	6.4	113.8	
		11-01-62	6.6	113.6	
		12-04-62	8.3	111.9	
		1-09-63	8.5	111.7	
		2-04-63	7.9	112.3	
		3-04-63	7.4	112.8	
		4-01-63	6.7	113.5	
		5-01-63	6.8	113.4	
		5-29-63	6.0	114.2	
		6-27-63	5.6	114.6	
8S/13E-09R01 M	135.0	8-02-62	1.4	133.6	4525
		9-05-62	1.2	133.8	
		10-01-62	3.3	131.7	
		11-01-62	5.1	129.9	
		12-05-62	6.2	128.8	
		1-09-63	6.2	128.8	
		2-04-63	5.8	129.2	
		3-04-63	4.7	130.3	
		4-01-63	5.2	129.8	
		5-01-63	5.4	129.6	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MERCED IRRIGATION DISTRICT			5-22.09		
8S/13E-09R01 M CONT.	135.0	5-27-63	2.8	132.2	4525
		6-27-63	3.0	132.0	
8S/14E-01A01 M	196.8	7-02-62	12.6	184.2	4525
		8-03-62	11.6	185.2	
		9-06-62	10.7	186.1	
		10-02-62	10.5	186.3	
		11-01-62	10.7	186.1	
		12-05-62	11.5	185.3	
		1-09-63	12.1	184.7	
		2-04-63	12.2	184.6	
		3-04-63	11.7	185.1	
		4-01-63	12.0	184.8	
		5-01-63	11.1	185.7	
		5-27-63	10.7	186.1	
		6-27-63	10.5	186.3	
EL NIDO IRRIGATION DISTRICT			5-22.10		
9S/13E-14R01 M	134.0	2-20-63	78.3	55.7	4525
9S/14E-20B01 M	151.0	2-20-63	67.3	83.7	4525
DELTA-MENDOTA AREA			5-22.11		
2S/04E-16H01 M	78.0	10-08-62	7.0	71.0	6001
		3-01-63	9.5	68.5	
2S/04E-25J01 M	80.4	10-09-62	21.0	59.4	6001
		3-04-63	27.1	53.3	
2S/04E-28A01 M	187.0	10-09-62	125.2	61.8	6001
		3-01-63	130.0	57.0	
2S/05E-32A01 M	76.0	10-08-62	21.8	54.2	6001
		3-04-63	24.4	51.6	
3S/05E-08R01 M	195.7	10-11-62	128.9	66.8	6001
		3-06-63	131.2	64.5	
3S/05E-08R02 M	195.7	10-11-62	130.7	65.0	6001
		3-06-63	127.2	68.5	
3S/05E-25Q01 M	207.0	10-17-62	120.5	86.5	6001
		3-08-63	121.6	85.4	
DELTA-MENDOTA AREA			5-22.11		
3S/05E-26K01 M	212.1	10-16-62	127.7	84.4	6001
		3-08-63	126.8	85.3	
3S/06E-16Q01 M	80.0	10-15-62	88.0	-8.0	6001
		3-05-63	53.3	26.7	
3S/06E-18N01 M	99.3	10-16-62	13.3	86.0	6001
		3-05-63	15.9	83.4	
3S/06E-25D01 M	63.5	10-15-62	31.6	31.9	6001
		3-08-63	□		
4S/06E-04H01 M	163.3	10-11-62	98.4	64.9	6001
		2-28-63	97.5	65.8	
4S/06E-09R01 M	166.3	10-11-62	143.3*	23.0	6001
		2-28-63	116.1	50.2	
4S/07E-27M01 M	68.0	10-18-62	24.1	43.9	6001
		3-07-63	23.8	44.2	
4S/07E-31D01 M	185.4	10-12-62	117.4	68.0	6001
		3-01-63	112.4*	73.0	
5S/07E-13K01 M	107.0	10-18-62	□		6001
		3-21-63	55.5	51.5	
5S/07E-14D01 M	130.4	10-17-62	75.3	55.1	6001
		3-18-63	78.9	51.5	
5S/08E-06K01 M	58.7	10-31-62	17.9	40.8	6001
		3-28-63	18.4	40.3	
6S/07E-12P01 M	248.3	10-08-62	17.2*	231.1	5050
		2-25-63	12.5	235.8	
6S/08E-12L01 M	64.3	11-01-62	□		6001
		2-25-63	□		5050
		3-28-63	25.5	38.8	6001
6S/08E-16M01 M	129.5	10-08-62	77.6	51.9	5050
		2-25-63	77.1	52.4	
6S/08E-27J01 M	114.5	10-09-62	51.4	63.1	5050
		2-26-63	47.1	67.4	

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STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
DELTA-MENDOTA AREA			5-22.11		
6S/08E-29J01 M	190.0	10-09-62	127.5	62.5	5050
		2-26-63	122.0	68.0	
7S/08E-22B01 M	128.0	2-27-63	@		5050
7S/08E-22L01 M	127.9	10-10-62	50.6	77.3	5050
		2-27-63	□		
7S/09E-04R01 M	65.6	10-10-62	19.4	46.2	6001
		2-26-63	16.0	49.6	5050
7S/09E-26N01 M	68.4	10-10-62	□		5050
		3-04-63	□		
8S/08E-01N01 M	123.2	10-11-62	20.9	102.3	5050
		3-06-63	26.1	97.1	
8S/08E-15J01 M	172.8	10-11-62	63.2	109.6	5050
		3-06-63	68.2	104.6	
8S/09E-26H01 M	75.0	10-22-62	56.2	18.8	6001
		3-04-63	19.8	55.2	5050
8S/09E-26H03 M	75.0	10-22-62	5.7	69.3	6001
		3-04-63	1.1	73.9	5050
8S/10E-21L04 M	75.0	10-22-62	9.0	66.0	6001
		3-05-63	2.4	72.6	5050
9S/08E-13D01 M	201.6	10-11-62	19.5	182.1	5050
		3-07-63	24.9	176.7	
9S/09E-18N01 M	153.6	10-11-62	36.0	117.6	5050
		3-07-63	37.2	116.4	
9S/09E-23L01 M	100.0	10-22-62	70.3	29.7	6001
		3-07-63	46.6	53.4	5050
9S/10E-19B01 M	84.0	10-22-62	4.9	79.1	6001
		3-05-63	□		5050
9S/10E-23J01 M	87.0	10-09-62	52.2	34.8	5050
		3-05-63	39.5*	47.5	
9S/11E-16H01 M	91.0	11-02-62	8.6	82.4	6001
DELTA-MENDOTA AREA			5-22.11		
9S/11E-16H01 M CONT.	91.0	2-27-63	8.4	82.6	5050
		3-27-63	8.5	82.5	6001
9S/11E-20J01 M	90.5	10-22-62	50.9	39.6	6001
		3-04-63	40.1	50.4	5050
10S/09E-06A01 M	147.0	10-16-62	6.8	140.2	5050
		3-06-63	6.0	141.0	
10S/09E-08B01 M	167.0	10-16-62	87.9	79.1	5050
		3-06-63	77.0	90.0	
10S/10E-02R01 M	99.5	10-11-62	22.4	77.1	5050
		3-04-63	21.6	77.9	
10S/10E-11R01 M	106.6	10-11-62	22.2	84.4	5050
		2-27-63	18.9	87.7	
10S/10E-31G01 M	191.1	10-11-62	□		5050
		3-04-63	167.8	23.3	
10S/11E-23D01 M	99.0	10-10-62	5.6	93.4	5050
		2-27-63	6.3	92.7	
10S/11E-27E02 M	101.3	10-10-62	50.0	51.3	5050
		2-27-63	51.7	49.6	
11S/10E-11J01 M	157.3	10-08-62	44.0	113.3	5050
		2-26-63	55.6	101.7	
11S/10E-22Q01 M	246.8	10-10-62	141.2	105.6	5050
		2-26-63	138.0	108.8	
11S/11E-02J02 M	106.0	10-23-62	1.9	104.1	6001
		2-27-63	1.5	104.5	5050
11S/11E-22K01 M	114.2	10-08-62	□		5050
		2-25-63	.7	113.5	
11S/11E-22Q03 M	119.0	10-08-62	12.2	106.8	5050
		10-23-62	15.7	103.3	6001
		2-25-63	8.0	111.0	5050
11S/12E-31C01 M	132.0	10-08-62	31.5	100.5	5050
		2-25-63	30.6	101.4	

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STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
DELTA-MENDOTA AREA			5-22.11		
12S/12E-04D01 M	138.0	10-23-62	3.9	134.1	6001
		3-12-63	3.0	135.0	
12S/12E-16H05 M	168.0	8-14-62	130.2	37.8	5000
		9-10-62	130.9	37.1	
		10-08-62	131.4	36.6	
		11-05-62	131.4	36.6	
		2-26-63	130.4	37.6	
		3-28-63	130.3	37.7	
		4-23-63	130.1	37.9	
		5-21-63	129.6	38.4	
		6-18-63	129.4	38.6	
12S/12E-20J01 M	183.0	10-01-62	@		6001
12S/12E-25D01 M	177.0	10-24-62	69.4	107.6	6001
		3-13-63	65.9	111.1	
12S/12E-25D02 M	177.0	10-24-62	14.6	162.4	6001
		3-13-63	14.3	162.7	
12S/13E-10N01 M	144.0	10-24-62	3.8	140.2	6001
		3-13-63	3.1	140.9	
12S/14E-30C01 M	154.0	10-24-62	25.1	128.9	6001
		3-13-63	23.3	130.7	
CHOWCHILLA WATER DISTRICT			5-22.12		
9S/14E-25R01 M	185.0	10-25-62	69.7	115.3	6001
		2-15-63	67.9	117.1	
9S/15E-22R02 M	216.5	10-26-61	105.0	111.5	6001
		11-21-61	97.3	119.2	
		12-20-61	96.4	120.1	
		1-17-62	93.0	123.5	
		2-27-62	75.1	141.4	
		3-21-62	73.0	143.5	
		4-25-62	86.0	130.5	
		5-21-62	□		
		6-19-62	101.2	115.3	
		7-25-62	□		
		8-24-62	□		
		9-20-62	113.0	103.5	
		10-18-62	105.4	111.1	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CHOWCHILLA WATER DISTRICT			5-22.12		
9S/15E-22R02 M CONT.	216.5	11-23-62	88.7	127.8	6001
		12-20-62	92.0	124.5	
		1-24-63	79.0	137.5	
		2-14-63	76.6	139.9	
		3-28-63	84.0	132.5	
		4-25-63	77.9	138.6	
		5-23-63	90.5	126.0	
		6-26-63	104.6	111.9	
9S/15E-25J02 M	232.0	10-31-62	45.0	187.0	6001
		2-15-63	49.2	182.8	
9S/15E-33B01 M	208.0	7-21-61	74.7	133.3	6001
		8-25-61	39.4	168.6	
		9-20-61	47.3	160.7	
		10-26-61	64.4	143.6	
		11-21-61	69.2*	138.8	
		12-20-61	61.5	146.5	
		1-17-62	62.2	145.8	
		2-27-62	40.3	167.7	
		3-21-62	35.3	172.7	
		4-25-62	33.2	174.8	
		5-21-62	33.3	174.7	
		6-19-62	38.3	169.7	
		7-25-62	52.5	155.5	
		8-24-62	60.6	147.4	
		9-20-62	62.5	145.5	
		10-18-62	60.4	147.6	
		11-23-62	60.0	148.0	
		12-20-62	58.7	149.3	
		1-24-63	63.7	144.3	
		2-14-63	58.4	149.6	
		3-28-63	44.8	163.2	
		4-25-63	35.4	172.6	
		5-23-63	36.3	171.7	
		6-26-63	33.9	174.1	
9S/16E-22R01 M	267.0	7-21-61	43.9	223.1	6001
		8-25-61	43.6	223.4	
		9-19-61	43.6	223.4	
		10-25-61	42.9	224.1	
		11-21-61	42.1	224.9	
		12-19-61	43.0	224.0	
		1-17-62	43.4	223.6	
		2-27-62	44.2	222.8	

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STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CHOWCHILLA WATER DISTRICT			5-22.12		
9S/16E-22R01 M CONT.	267.0	3-21-62	44.2	222.8	6001
		4-25-62	44.2	222.8	
		5-21-62	44.4	222.6	
		6-19-62	43.9	223.1	
		7-25-62	43.3	223.7	
		8-24-62	41.9	225.1	
		9-20-62	41.2	225.8	
		10-18-62	40.6	226.4	
		11-23-62	40.3	226.7	
		12-20-62	40.9	226.1	
		1-24-63	41.7	225.3	
		2-14-63	42.3	224.7	
		3-28-63	43.2	223.8	
		4-24-63	42.7	224.3	
		5-23-63	45.0	222.0	
		6-26-63	43.8	223.2	
9S/17E-21L01 M	320.0	10-23-62	98.5	221.5	6001
		2-13-63	97.2	222.8	
9S/17E-35J01 M	320.0	10-23-62	75.5	244.5	6001
		2-13-63	86.0	234.0	
9S/18E-33Q01 M	365.0	10-22-62	50.1	314.9	6001
		2-13-63	51.0	314.0	
10S/14E-08B03 M	150.0	7-21-61	77.9	72.1	6001
		8-25-61	78.7*	71.3	
		9-20-61	77.4*	72.6	
		10-26-61	75.1*	74.9	
		11-21-61	74.1	75.9	
		12-20-61	69.5	80.5	
		1-17-62	67.7	82.3	
		2-27-62	65.0	85.0	
		3-22-62	65.1	84.9	
		4-25-62	66.9	83.1	
		5-21-62	70.0	80.0	
		6-19-62	75.2*	74.8	
		7-25-62	79.0*	71.0	
		8-24-62	80.7	69.3	
		9-20-62	78.7	71.3	
		10-18-62	75.7	74.3	
		11-21-62	70.7	79.3	
		12-21-62	69.4	80.6	
		1-24-63	67.5	82.5	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CHOWCHILLA WATER DISTRICT			5-22.12		
10S/14E-08B03 M CONT.	150.0	2-14-63	66.0	84.0	6001
		3-28-63	68.3	81.7	
		4-25-63	66.7	83.3	
		5-23-63	68.2	81.8	
		6-26-63	72.1	77.9	
10S/14E-26C01 M	156.0	10-30-62	DRY		6001
		10-31-62	#		
10S/15E-23K01 M	194.0	10-29-62	82.9	111.1	6001
		2-18-63	74.8	119.2	
10S/15E-27D03 M	183.0	9-20-61	98.1	84.9	6001
		10-26-61	90.8*	92.2	
		11-21-61	87.7	95.3	
		12-20-61	84.5	98.5	
		1-17-62	82.5	100.5	
		2-27-62	81.3	101.7	
		3-21-62	77.1	105.9	
		4-25-62	□		
		6-19-62	□		
		7-25-62	□		
		8-24-62	86.0	97.0	
		9-20-62	84.0	99.0	
		10-19-62	80.8	102.2	
		11-21-62	77.3	105.7	
		12-21-62	75.9	107.1	
		1-24-63	73.6	109.4	
		2-14-63	72.7	110.3	
		3-28-63	□		
		4-25-63	76.3	106.7	
		5-23-63	□		
		6-26-63	82.5	100.5	
10S/16E-09E01 M	232.0	7-20-61	97.9	134.1	6001
		8-25-61	103.4	128.6	
		9-20-61	□		
		10-25-61	90.9	141.1	
		11-21-61	82.8	149.2	
		12-19-61	78.1	153.9	
		1-17-62	74.8	157.2	
		2-27-62	73.9	158.1	
		3-21-62	73.5	158.5	
		4-24-62	77.2	154.8	
		5-21-62	79.7	152.3	

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STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CHOWCHILLA WATER DISTRICT			5-22.12		
10S/16E-09E01 M	232.0	6-19-62	¤		6001
CONT.		7-25-62	89.5	142.5	
		8-24-62	88.1	143.9	
		9-19-62	84.1	147.9	
		10-17-62	79.9	152.1	
		11-21-62	77.2	154.8	
		12-20-62	77.2	154.8	
		1-24-63	82.6	149.4	
		2-14-63	71.0	161.0	
		3-28-63	76.2	155.8	
		4-25-63	77.8	154.2	
		5-23-63	79.7	152.3	
		6-26-63	80.5	151.5	
10S/16E-29R01 M	209.5	10-29-62	82.2	127.3	6001
		2-19-63	77.9	131.6	
MADERA IRRIGATION DISTRICT			5-22.13		
10S/18E-20B01 M	326.0	10-22-62	62.2	263.8	6001
		2-13-63	62.4	263.6	
10S/19E-16D01 M	387.0	10-22-62	17.3	369.7	6001
		2-13-63	24.7	362.3	
11S/16E-06A01 M	196.0	7-20-61	75.0	121.0	6001
		8-24-61	79.9	116.1	
		9-19-61	78.7	117.3	
		10-25-61	78.2	117.8	
		11-21-61	78.0	118.0	
		12-19-61	74.8	121.2	
		1-18-62	72.7	123.3	
		2-26-62	70.6	125.4	
		3-21-62	70.0	126.0	
		4-24-62	71.7	124.3	
		5-22-62	72.5	123.5	
		6-18-62	73.4	122.6	
		7-24-62	75.0	121.0	
		8-24-62	76.0	120.0	
		9-19-62	76.4	119.6	
		10-19-62	74.9	121.1	
		11-21-62	72.2	123.8	
		12-20-62	71.8	124.2	
		1-23-63	68.4	127.6	
		2-14-63	67.4	128.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MADERA IRRIGATION DISTRICT			5-22.13		
11S/16E-06A01 M	196.0	3-28-63	68.2	127.8	6001
CONT.		4-25-63	68.8	127.2	
		5-23-63	70.2	125.8	
		6-26-63	70.5	125.5	
11S/16E-10N01 M	205.0	7-21-61	78.4	126.6	6001
		8-24-61	79.7	125.3	
		9-18-61	80.2	124.8	
		10-25-61	79.2	125.8	
		11-21-61	78.6	126.4	
		12-19-61	78.0	127.0	
		1-18-62	76.7	128.3	
		2-26-62	76.6	128.4	
		3-21-62	75.4	129.6	
		4-24-62	76.3	128.7	
		5-22-62	75.7	129.3	
		6-18-62	75.3	129.7	
		7-24-62	75.4	129.6	
		8-24-62	74.9	130.1	
		9-19-62	73.3	131.7	
		10-19-62	72.0	133.0	
		11-21-62	70.6	134.4	
		12-20-62	69.6	135.4	
		1-23-63	68.8	136.2	
		2-14-63	68.2	136.8	
		3-28-63	70.0	135.0	
		4-25-63	69.9	135.1	
		5-24-63	70.3	134.7	
		6-26-63	71.5	133.5	
11S/17E-27C01 M	250.6	2-19-63	70.9	179.7	6001
11S/18E-20N01 M	274.4	12-21-62	¤		6001
		2-19-63	72.5	201.9	
11S/18E-27M01 M	284.0	7-20-61	¤		6001
		8-24-61	80.5	203.5	
		9-19-61	80.3	203.7	
		10-25-61	79.1	204.9	
		11-21-61	79.3	204.7	
		12-19-61	80.0	204.0	
		1-16-62	79.6	204.4	
		2-27-62	80.2	203.8	
		3-21-62	79.2	204.8	
		4-24-62	80.6	203.4	

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MADERA IRRIGATION DISTRICT			5-22.13		
11S/18E-27M01 M CONT.	284.0	5-21-62	¤		6001
		6-18-62	79.8	204.2	
		7-24-62	80.9	203.1	
		8-23-62	81.5	202.5	
		9-20-62	84.0	200.0	
		10-17-62	81.0	203.0	
		11-20-62	¤		
		12-21-62	¤		
		1-23-63	81.0	203.0	
		2-13-63	80.3	203.7	
		3-27-63	80.2	203.8	
		4-25-63	80.2	203.8	
		5-24-63	80.5	203.5	
		6-26-63	80.7	203.3	
11S/20E-22M01 M	416.0	10-15-62	107.7	308.3	6001
		2-11-63	112.9	303.1	
12S/16E-23A01 M	205.4	12-26-62	69.4	136.0	6001
		2-19-63	66.0	139.4	
12S/17E-08G01 M	229.0	7-20-61	85.9	143.1	6001
		8-23-61	89.7	139.3	
		9-18-61	89.9	139.1	
		10-24-61	85.2	143.8	
		11-20-61	81.8	147.2	
		12-18-61	79.3	149.7	
		1-16-62	78.5	150.5	
		2-26-62	75.7	153.3	
		3-20-62	76.8	152.2	
		4-24-62	78.6	150.4	
		5-21-62	79.5	149.5	
		6-18-62	82.5	146.5	
		7-24-62	84.7	144.3	
		8-23-62	86.3	142.7	
		9-19-62	85.5	143.5	
		10-17-62	83.4	145.6	
		11-20-62	81.2	147.8	
		12-20-62	79.2	149.8	
		1-23-63	77.7	151.3	
		2-12-63	77.0	152.0	
		3-27-63	79.3	149.7	
		4-24-63	79.1	149.9	
		5-23-63	78.9	150.1	
		6-26-63	82.9	146.1	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MADERA IRRIGATION DISTRICT			5-22.13		
12S/17E-20P01 M	218.0	7-20-61	¤		6001
		8-23-61	¤		
		9-18-61	93.8*	124.2	
		10-24-61	90.9*	127.1	
		11-20-61	79.5*	138.5	
		12-18-61	81.2*	136.8	
		1-16-62	71.9	146.1	
		2-26-62	69.0	149.0	
		3-20-62	77.2	140.8	
		4-24-62	79.0	139.0	
		5-21-62	¤		
		6-18-62	¤		
		7-24-62	87.6	130.4	
		8-23-62	¤		
		9-19-62	91.5	126.5	
		10-17-62	84.5	133.5	
		11-20-62	74.5	143.5	
		12-20-62	77.9	140.1	
		1-23-63	77.7	140.3	
		2-12-63	67.5	150.5	
		3-27-63	79.9	138.1	
		4-24-63	79.1	138.9	
		5-23-63	¤		
		6-25-63	¤		
12S/17E-21H01 M	228.0	12-27-62	68.0	160.0	6001
		2-19-63	¤		
12S/17E-26C01 M	235.0	7-19-61	78.2*	156.8	6001
		8-23-61	69.4*	165.6	
		9-18-61	69.2	165.8	
		10-24-61	68.8	166.2	
		11-20-61	69.9	165.1	
		12-18-61	67.6	167.4	
		1-16-62	66.5	168.5	
		2-26-62	64.9	170.1	
		3-20-62	64.3	170.7	
		4-24-62	67.8	167.2	
		5-21-62	67.9	167.1	
		6-18-62	67.6	167.4	
		7-24-62	67.6	167.4	
		8-22-62	66.1	168.9	
		9-19-62	65.2	169.8	
		10-17-62	64.0	171.0	
		11-20-62	63.3	171.7	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MADERA IRRIGATION DISTRICT			5-22.13		
12S/17E-26C01 M CONT.	235.0	12-20-62	62.8	172.2	6001
		1-23-63	62.0	173.0	
		2-12-63	61.8	173.2	
		3-27-63	64.6	170.4	
		4-24-63	64.6	170.4	
		5-23-63	64.8	170.2	
		6-25-63	65.0	170.0	
12S/17E-34R01 M	235.0	7-19-61	77.2	157.8	6001
		8-23-61	81.5	153.5	
		9-18-61	72.0	163.0	
		10-24-61	70.2	164.8	
		11-20-61	68.3	166.7	
		12-18-61	63.2	171.8	
		1-16-62	63.3	171.7	
		2-26-62	59.4	175.6	
		3-20-62	59.9	175.1	
		4-24-62	65.5	169.5	
		5-21-62	64.4	170.6	
		6-18-62	65.8	169.2	
		7-25-62	69.9	165.1	
		8-22-62	67.3	167.7	
		9-19-62	64.3	170.7	
		10-17-62	63.8	171.2	
		11-20-62	61.2	173.8	
		12-20-62	60.5	174.5	
		1-23-63	60.5	174.5	
		2-12-63	56.8	178.2	
		3-27-63	60.0	175.0	
		4-24-63	64.9	170.1	
		5-22-63	61.8	173.2	
		6-25-63	70.1	164.9	
12S/18E-13R01 M	288.0	7-19-61	81.2	205.8	6001
		8-23-61	83.3	203.7	
		9-18-61	81.3	205.7	
		10-24-61	81.3	205.7	
		11-20-61	80.0	207.0	
		12-18-61	79.7	207.3	
		1-16-62	79.4	207.6	
		2-26-62	79.4	207.6	
		3-20-62	78.7	208.3	
		4-24-62	80.6	206.4	
		5-21-62	80.6	206.4	
		6-18-62	82.4	204.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MADERA IRRIGATION DISTRICT			5-22.13		
12S/18E-13R01 M CONT.	288.0	7-23-62	82.2	204.8	6001
		8-22-62	84.7	202.3	
		9-18-62	81.9	205.1	
		10-17-62	81.1	205.9	
		11-21-62	80.2	206.8	
		12-20-62	79.9	207.1	
		1-23-63	79.7	207.3	
		2-12-63	79.3	207.7	
		3-27-63	80.7	206.3	
		4-24-63	79.5	207.5	
		5-23-63	79.0	208.0	
		6-25-63	80.5	206.5	
12S/18E-21G01 M	265.0	12-20-62	81.2	183.8	6001
		2-18-63	80.2	184.8	
12S/18E-21H01 M	265.0	7-19-61	81.7	183.3	6001
		8-23-61	84.0	181.0	
		9-18-61	83.9	181.1	
		10-24-61	82.8	182.2	
		11-20-61	82.4	182.6	
		12-18-61	81.7	183.3	
		1-18-62	80.4	184.6	
		2-26-62	79.1	185.9	
		3-20-62	78.4	186.6	
		4-24-62	79.3	185.7	
		5-21-62	79.8	185.2	
		6-18-62	80.4	184.6	
		7-23-62	81.4	183.6	
		8-22-62	81.7	183.3	
		9-19-62	81.3	183.7	
		10-17-62	80.4	184.6	
		11-21-62	79.4	185.6	
		12-20-62	79.2	185.8	
		1-23-63	80.0	185.0	
		2-12-63	77.6	187.4	
		3-27-63	77.1	187.9	
		4-24-63	76.9	188.1	
		5-23-63	77.2	187.8	
		6-25-63	77.9	187.1	
12S/19E-28A01 M	307.0	12-20-62	82.3	224.7	6001
		2-11-63	81.6	225.4	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
WEST CHOWCHILLA-MADERA AREA			5-22.14		
10S/13E-14M01 M	120.5	10-24-62	¤		6001
		2-20-63	¤		
10S/14E-01R01 M	177.0	10-29-62	70.6	106.4	6001
		2-12-63	66.5	110.5	
10S/14E-31H01 M	131.0	7-21-61	28.6	102.4	6001
		8-25-61	29.4	101.6	
		9-20-61	30.4	100.6	
		10-26-61	31.6	99.4	
		11-21-61	31.3	99.7	
		12-20-61	31.0	100.0	
		1-17-62	30.8	100.2	
		2-27-62	23.8	107.2	
		3-22-62	18.7	112.3	
		4-25-62	19.0	112.0	
		5-21-62	18.6	112.4	
		6-19-62	20.8	110.2	
		7-25-62	21.7	109.3	
		8-24-62	23.1	107.9	
		9-20-62	24.2	106.8	
		10-18-62	25.1	105.9	
		11-21-62	26.1	104.9	
		12-21-62	28.7	102.3	
		1-24-63	27.4	103.6	
		2-14-63	26.9	104.1	
		3-28-63	26.0	105.0	
		4-25-63	23.6	107.4	
		5-23-63	20.6	110.4	
		6-26-63	19.8	111.2	
10S/14E-34H01 M	148.0	7-21-61	50.8	97.2	6001
		8-25-61	55.4	92.6	
		9-20-61	56.1	91.9	
		10-26-61	51.0	97.0	
		11-21-61	52.2	95.8	
		12-20-61	52.5	95.5	
		1-17-62	52.8	95.2	
		2-27-62	53.6	94.4	
		3-22-62	52.3	95.7	
		4-25-62	52.4	95.6	
		5-21-62	¤		
		6-19-62	¤		
		7-25-62	56.9	91.1	
		8-24-62	54.4	93.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
WEST CHOWCHILLA-MADERA AREA			5-22.14		
10S/14E-34H01 M CONT.	148.0	9-20-62	¤		6001
		10-18-62	55.9	92.1	
		11-21-62	59.7	88.3	
		12-21-62	56.2	91.8	
		1-24-63	55.8	92.2	
		2-14-63	49.5	98.5	
		3-28-63	50.9	97.1	
		4-25-63	52.1	95.9	
		5-23-63	52.1	95.9	
		6-26-63	53.0	95.0	
11S/14E-33L01 M	135.0	7-24-62	¤		6001
		8-23-62	18.4	116.6	
		9-19-62	15.0	120.0	
		10-19-62	15.0	120.0	
		11-20-62	13.8	121.2	
		12-20-62	12.8	122.2	
		1-23-63	12.6	122.4	
		2-19-63	12.0	123.0	
		3-27-63	12.1	122.9	
		4-25-63	14.0	121.0	
		5-23-63	11.0	124.0	
		6-25-63	¤		
11S/15E-33E01 M	158.0	10-19-62	¤		6001
		2-19-63	26.6	131.4	
11S/15E-33P01 M	160.0	7-20-61	26.1	133.9	6001
		8-24-61	36.5*	123.5	
		9-19-61	35.9	124.1	
		10-25-61	37.6	122.4	
		11-22-61	28.1	131.9	
		12-19-61	25.5	134.5	
		1-18-62	25.2	134.8	
		2-26-62	24.7	135.3	
		3-20-62	24.8	135.2	
		4-24-62	27.5	132.5	
		5-22-62	36.7	123.3	
		6-18-62	36.7	123.3	
		7-24-62	35.2	124.8	
		8-23-62	34.9	125.1	
		9-19-62	34.4	125.6	
		10-19-62	33.7	126.3	
		11-21-62	24.4	135.6	
		12-20-62	23.8	136.2	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
WEST CHOWCHILLA-MADERA AREA		5-22.14			
11S/15E-33P01 M CONT.	160.0	1-23-63	23.6	136.4	6001
		2-19-63	24.6	135.4	
		3-27-63	31.1	128.9	
		4-25-63	35.5	124.5	
		5-24-63	36.1	123.9	
		6-26-63	37.8	122.2	
12S/14E-25H01 M	150.0	7-20-61	¤		6001
		8-24-61	¤		
		9-19-61	19.5	130.5	
		10-25-61	16.7	133.3	
		11-22-61	12.9	137.1	
		12-19-61	13.3	136.7	
		1-18-62	13.4	136.6	
		2-26-62	12.0	138.0	
		3-20-62	11.1	138.9	
		4-24-62	¤		
		5-22-62	¤		
		6-18-62	¤		
		7-24-62	¤		
		8-23-62	¤		
		9-19-62	13.8	136.2	
		10-19-62	17.0	133.0	
		11-21-62	14.0	136.0	
		12-20-62	12.1	137.9	
		1-23-63	14.0	136.0	
		2-19-63	13.5	136.5	
		3-27-63	¤		
		4-25-63	12.6	137.4	
		5-23-63	12.2	137.8	
		6-25-63	¤		
12S/14E-28G01 M	145.0	10-25-62	13.9	131.1	6001
		2-19-63	13.5	131.5	
12S/15E-14L01 M	165.1	10-24-62	38.4	126.7	6001
		2-19-63	35.4	129.7	
13S/16E-02C01 M	195.0	7-19-61	69.7	125.3	6001
		8-23-61	71.6	123.2	
		9-18-61	75.2	119.8	
		10-24-61	70.7	124.3	
		11-20-61	63.4	131.6	
		12-18-61	59.8	135.2	
		1-18-62	56.4	138.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
WEST CHOWCHILLA-MADERA AREA		5-22.14			
13S/16E-02C01 M CONT.	195.0	2-26-62	60.1	134.9	6001
		3-20-62	58.9	136.1	
		4-24-62	60.3	134.7	
		5-21-62	62.1	132.9	
		6-18-62	70.1	124.9	
		7-24-62	80.2	114.8	
		8-23-62	83.2	111.8	
		9-19-62	78.0	117.0	
		10-17-62	77.2	117.8	
		11-21-62	66.4	128.6	
		12-20-62	73.6	121.4	
		1-23-63	56.4	138.6	
		2-12-63	56.0	139.0	
		3-27-63	64.8	130.2	
		4-24-63	56.6	138.4	
		5-22-63	69.1	125.9	
FRESNO IRRIGATION DISTRICT		5-22.15			
12S/20E-14A01 M	360.0	7-22-62	96.6	263.4	6001
		8-22-62	96.9	263.1	
		9-19-62	96.5	263.5	
		11-21-62	95.6	264.4	
		12-19-62	97.0	263.0	
		1-23-63	95.9	264.1	
		2-13-63	95.8	264.2	
		3-25-63	95.2	264.8	
		4-23-63	101.2	258.8	
		5-21-63	95.2	264.8	
		6-24-63	96.8	263.2	
12S/21E-34D01 M	387.7	7-27-62	58.4	329.3	5631
		8-30-62	¤		
		9-28-62	¤		
		10-27-62	59.0	328.7	
		11-27-62	62.3	325.4	
		12-27-62	¤		
		2-01-63	57.6	330.1	
		2-27-63	57.1	330.6	
		3-28-63	57.0	330.7	
		5-01-63	56.0	331.7	
		5-28-63	57.3	330.4	
		6-27-63	57.6	330.1	
12S/22E-21E01 M	473.0	10-15-62	27.6	445.4	6001

TABLE C-I

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO IRRIGATION DISTRICT			5-22.15		
12S/22E-21E01 M	473.0	2-12-63	24.5	448.5	6001
13S/17E-22B01 M	220.8	7-02-62	44.1	176.7	5631
		7-25-62	42.1	178.7	
		8-28-62	41.0	179.8	
		9-26-62	40.6	180.2	
		10-24-62	41.1	179.7	
		11-30-62	46.0	174.8	
		12-29-62	42.7	178.1	
		1-28-63	42.4	178.4	
		2-25-63	42.5	178.3	
		3-28-63	43.3	177.5	
		4-29-63	46.7	174.1	
		5-27-63	41.6	179.2	
		6-27-63	¤		
13S/17E-33D01 M	212.0	7-19-61	¤		6001
		8-21-61	63.6	148.4	
		9-18-61	61.8	150.2	
		10-23-61	¤		
		11-20-61	61.3	150.7	
		12-18-61	60.2	151.8	
		1-16-62	51.7	160.3	
		2-26-62	51.3	160.7	
		3-20-62	50.5	161.5	
		4-23-62	51.7	160.3	
		5-21-62	51.1	160.9	
		6-18-62	¤		
		7-23-62	58.0	154.0	
		8-22-62	59.0	153.0	
		9-18-62	58.4	153.6	
		10-16-62	55.0	157.0	
		11-21-62	56.0	156.0	
		12-19-62	54.8	157.2	
		1-23-63	50.2	161.8	
		2-11-63	50.1	161.9	
		3-25-63	52.0	160.0	
		4-23-63	54.0	158.0	
		5-22-63	52.0	160.0	
		6-24-63	53.5	158.5	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO IRRIGATION OISTRICT			5-22.15		
13S/18E-10P01 M	258.0	7-19-61	57.0	201.0	6001
		8-21-61	56.2	201.8	
		9-18-61	55.4	202.6	
		10-23-61	56.6*	201.4	
		11-21-61	56.7	201.3	
		12-18-61	55.6	202.4	
		1-16-62	57.0	201.0	
		2-26-62	56.6	201.4	
		3-20-62	56.2	201.8	
		4-23-62	56.1	201.9	
		5-21-62	55.2	202.8	
		6-18-62	54.5	203.5	
		7-16-62	57.4	200.6	
		8-22-62	53.6	204.4	
		9-18-62	52.8	205.2	
		10-16-62	53.5	204.5	
		11-21-62	56.8	201.2	
		12-19-62	55.1	202.9	
		1-23-63	55.5	202.5	
		2-27-63	55.2	202.8	
		3-25-63	55.7	202.3	
		4-23-63	57.1	200.9	
		5-21-63	55.5	202.5	
		6-24-63	53.9	204.1	
13S/18E-16D01 M	255.8	10-22-62	56.3	199.5	6001
		2-20-63	56.8	199.0	
13S/18E-34D01 M	245.0	7-19-61	62.8	182.2	6001
		8-21-61	63.3	181.7	
		9-18-61	62.7	182.3	
		10-23-61	61.5	183.5	
		11-20-61	63.8	181.2	
		12-18-61	63.5	181.5	
		1-16-62	62.7	182.3	
		2-26-62	62.5	182.5	
		3-20-62	62.8	182.2	
		4-23-62	65.0	180.0	
		5-21-62	62.3	182.7	
		6-18-62	62.0	183.0	
		7-23-62	62.8	182.2	
		8-22-62	62.5	182.5	
		9-18-62	62.3	182.7	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO IRRIGATION DISTRICT			5-22.15		
13S/18E-34D01 M CONT.	245.0	10-16-62	62.1	182.9	6001
		11-21-62	66.2	178.8	
		12-19-62	62.8	182.2	
		1-23-63	62.5	182.5	
		2-27-63	61.3	183.7	
		3-25-63	62.0	183.0	
		4-23-63	65.5	179.5	
		5-22-63	64.0	181.0	
		6-24-63	60.5	184.5	
13S/19E-09Q01 M	288.2	7-25-62	64.4	223.8	5631
		8-28-62	□		
		9-26-62	64.4	223.8	
		10-24-62	65.5	222.7	
		11-30-62	64.6	223.6	
		12-28-62	66.2	222.0	
		1-28-63	65.7	222.5	
		2-25-63	65.8	222.4	
		3-28-63	65.5	222.7	
		4-29-63	65.5	222.7	
		6-27-63	□		
13S/19E-16K01 M	290.0	7-19-61	73.4	216.6	6001
		8-21-61	73.2	216.8	
		9-18-61	73.4	216.6	
		10-23-61	73.5	216.5	
		11-20-61	74.8	215.2	
		12-18-61	75.5	214.5	
		1-16-62	76.0	214.0	
		2-26-62	75.0	215.0	
		3-20-62	74.0	216.0	
		4-23-62	75.2	214.8	
		5-21-62	73.6	216.4	
		6-18-62	73.3	216.7	
		7-23-62	72.9	217.1	
		8-22-62	72.7	217.3	
		9-18-62	72.5	217.5	
		10-16-62	72.5	217.5	
		11-21-62	74.4	215.6	
		12-19-62	73.7	216.3	
		1-23-63	73.4	216.6	
		2-14-63	73.4	216.6	
		3-25-63	73.1	216.9	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESND IRRIGATION DISTRICT			5-22.15		
13S/19E-16K01 M CONT.	290.0	4-23-63	77.8	212.2	6001
		5-21-63	73.0	217.0	
		6-24-63	74.3	215.7	
13S/20E-02L01 M	336.7	7-20-61	73.9*	262.8	5631
		8-31-61	74.4	262.3	
		9-25-61	72.7	264.0	
		10-27-61	73.1	263.6	
		11-29-61	73.8	262.9	
		12-30-61	74.1	262.6	
		2-01-62	74.7	262.0	
		2-28-62	74.7	262.0	
		3-29-62	74.7	262.0	
		4-30-62	74.8	261.9	
		5-31-62	75.2	261.5	
		6-28-62	75.7	261.0	
		7-27-62	75.9	260.8	
		8-30-62	77.0	259.7	
		9-27-62	77.0	259.7	
		10-22-62	77.0	259.7	
		11-27-62	77.1	259.6	
		12-27-62	78.9	257.8	
		2-01-63	78.2	258.5	
		2-27-63	78.0	258.7	
		3-28-63	78.1	258.6	
		5-01-63	78.2	258.5	
		5-28-63	81.8	254.9	
		6-27-63	82.0	254.7	
13S/20E-21J01 M	310.0	8-01-62	81.5	228.5	4200
		8-29-62	83.4	226.6	
		10-02-62	82.8	227.2	
		10-31-62	81.8	228.2	
		12-01-62	81.7	228.3	
		12-26-62	81.2	228.8	
		1-30-63	80.9	229.1	
		2-27-63	80.2	229.8	
		4-02-63	79.4	230.6	
		4-30-63	79.1	230.9	
		5-28-63	79.5	230.5	
		6-31-63	82.0	228.0	
13S/21E-23D01 M	364.0	7-28-62	38.9	325.1	5631

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO IRRIGATION DISTRICT			5-22.15		
13S/21E-23D01 M CONT.	364.0	8-30-62	37.2	326.8	5631
		9-27-62	35.8	328.2	
		10-26-62	36.2	327.8	
		11-28-62	37.6	326.4	
		12-28-62	37.7	326.3	
		2-01-63	38.4	325.6	
		2-27-63	38.6	325.4	
		3-28-63	39.1	324.9	
		5-01-63	39.3	324.7	
		5-28-63	38.6	325.4	
		6-27-63	38.4	325.6	
13S/23E-31P01 M	406.5	7-28-62	34.9	371.6	5631
		8-29-62	35.5	371.0	
		9-27-62	34.7	371.8	
		10-26-62	34.2	372.3	
		11-28-62	33.0	373.5	
		12-27-62	33.5	373.0	
		2-01-63	34.2	372.3	
		2-27-63	34.0	372.5	
		3-28-63	34.2	372.3	
		5-01-63	34.7	371.8	
		5-28-63	34.5	372.0	
		6-27-63	34.6	371.9	
14S/17E-13H02 M	215.0	7-20-61	74.6	140.4	6001
		8-22-61	76.7	138.3	
		9-19-61	77.7	137.3	
		10-23-61	73.7	141.3	
		11-20-61	70.0	145.0	
		12-19-61	69.3	145.7	
		1-17-62	67.5	147.5	
		2-27-62	68.2	146.8	
		3-20-62	76.5	138.5	
		4-23-62	75.6	139.4	
		5-21-62	70.5	144.5	
		6-18-62	74.7	140.3	
		7-24-62	84.5	130.5	
		8-23-62	88.2	126.8	
		9-18-62	78.5	136.5	
		10-16-62	75.3	139.7	
		11-21-62	73.9	141.1	
		12-19-62	71.2	143.8	
		1-23-63	69.5	145.5	
		2-25-63	68.4	146.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO IRRIGATION DISTRICT			5-22.15		
14S/17E-13H02 M CONT.	215.0	3-25-63	71.3	143.7	6001
		4-23-63	70.3	144.7	
		5-22-63	¤		
		6-24-63	¤		
14S/18E-08J01 M	227.4	7-02-62	68.3	159.1	5631
		7-25-62	69.0	158.4	
		8-28-62	80.2	147.2	
		9-26-62	69.0	158.4	
		10-24-62	66.6	160.8	
		11-29-62	66.0	161.4	
		12-29-62	65.1	162.3	
		1-28-63	64.9	162.5	
		2-25-63	65.1	162.3	
		3-28-63	64.9	162.5	
		4-29-63	67.8	159.6	
		5-27-63	67.1	160.3	
		6-25-63	67.5	159.9	
14S/19E-20B01 M	247.2	7-02-62	49.9	197.3	5631
		7-25-62	52.0	195.2	
		8-29-62	55.4	191.8	
		9-26-62	54.7	192.5	
		10-25-62	53.7	193.5	
		11-29-62	53.1	194.1	
		12-29-62	52.7	194.5	
		1-31-63	55.5	191.7	
		2-26-63	53.6	193.6	
		3-28-63	53.4	193.8	
		4-30-63	56.4	190.8	
		5-27-63	56.1	191.1	
		6-26-63	56.5	190.7	
14S/20E-06H01 M	282.5	7-26-61	71.8*	210.7	5631
		8-29-61	73.6*	208.9	
		9-27-61	71.8*	210.7	
		10-28-61	64.9	217.6	
		11-26-61	64.6	217.9	
		12-26-61	64.3	218.2	
		1-26-62	64.1	218.4	
		2-27-62	63.6	218.9	
		4-11-62	71.0*	211.5	
		4-27-62	71.2*	211.3	
		5-29-62	65.3	217.2	
		6-29-62	71.2	211.3	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO IRRIGATION DISTRICT			5-22.15		
14S/20E-06H01 M CONT.	282.5	7-25-62	68.1	214.4	5631
		8-30-62	74.2	208.3	
		9-27-62	66.4	216.1	
		10-25-62	67.0	215.5	
		11-28-62	72.0	210.5	
		12-28-62	71.1	211.4	
		1-31-63	71.4	211.1	
		2-26-63	70.3	212.2	
		3-28-63	70.5	212.0	
		4-30-63	65.3	217.2	
		5-29-63	66.4	216.1	
		6-26-63	65.2	217.3	
14S/21E-14A01 M	334.0	7-27-62	45.9	288.1	5631
		8-29-62	46.2	287.8	
		9-27-62	46.0	288.0	
		10-26-62	45.4	288.6	
		11-28-62	44.6	289.4	
		12-27-62	44.5	289.5	
		1-31-63	45.0	289.0	
		2-27-63	44.8	289.2	
		3-28-63	45.0	289.0	
		4-30-63	42.4	291.6	
		5-27-63	¤		
		6-26-63	¤		
14S/22E-01P01 M	400.0	7-28-61	48.5	351.5	5631
		8-29-61	¤		
		9-29-61	49.3	350.7	
		10-31-61	49.5	350.5	
		12-01-61	49.4	350.6	
		12-31-61	49.3	350.7	
		2-01-62	49.1	350.9	
		2-28-62	45.7	354.3	
		4-09-62	48.2	351.8	
		5-02-62	47.8	352.2	
		5-29-62	47.4	352.6	
		6-28-62	46.8	353.2	
		7-28-62	47.2	352.8	
		8-29-62	47.3	352.7	
		9-27-62	47.3	352.7	
		10-26-62	47.0	353.0	
		11-28-62	46.6	353.4	
		12-27-62	49.4	350.6	
		2-01-63	50.0	350.0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO IRRIGATION DISTRICT			5-22.15		
14S/22E-01P01 M CONT.	400.0	2-27-63	50.1	349.9	5631
		3-28-63	50.6	349.4	
		4-30-63	46.0	354.0	
		5-29-63	¤		
		6-26-63	¤		
15S/20E-13E02 M	282.5	7-27-61	37.0	245.5	5631
		8-30-61	37.8	244.7	
		9-28-61	37.6	244.9	
		10-30-61	38.2	244.3	
		11-30-61	38.8	243.7	
		12-29-61	38.8	243.7	
		2-01-62	38.7	243.8	
		2-26-62	35.4	247.1	
		4-10-62	40.1	242.4	
		5-01-62	39.8	242.7	
		5-29-62	38.8	243.7	
		6-28-62	¤		
		7-27-62	37.1	245.4	
		8-29-62	36.4	246.1	
		9-27-62	37.6	244.9	
		10-25-62	37.1	245.4	
		11-28-62	41.6	240.9	
		12-28-62	38.8	243.7	
		1-31-63	38.6	243.9	
		2-26-63	38.8	243.7	
		3-28-63	39.0	243.5	
		4-30-63	40.1	242.4	
		5-29-63	40.1	242.4	
		6-26-63	40.4	242.1	
CITY OF FRESNO			5-22.16		
13S/20E-23B01 M	325.0	7-01-61	81.3	243.7	4200
		8-01-61	83.3	241.7	
		9-01-61	83.3	241.7	
		10-01-61	78.4	246.6	
		11-01-61	78.9	246.1	
		12-01-61	78.8	246.2	
		1-01-62	79.9	245.1	
		2-01-62	79.8	245.2	
		3-01-62	79.7	245.3	
		4-01-62	79.6	245.4	
		5-01-62	81.8	243.2	
		6-01-62	82.3	242.7	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CITY OF FRESNO		5-22.16			
13S/20E-23B01 M CONT.	325.0	7-01-62	83.2	241.8	4200
		8-01-62	85.0	240.0	
		9-01-62	86.3	238.7	
		10-01-62	85.9	239.1	
		11-01-62	84.7	240.3	
		12-01-62	84.6	240.4	
		1-01-63	82.1	242.9	
		2-01-63	82.1	242.9	
		3-01-63	82.9	242.1	
		4-01-63	82.8	242.2	
		5-01-63	82.6	242.4	
		6-01-63	82.6	242.4	
13S/20E-35H02 M	305.3	7-01-61	78.4	226.9	4200
		8-01-61	80.5	224.8	
		8-01-61	81.3	224.0	
		10-01-61	84.2	221.1	
		11-01-61	82.1	223.2	
		12-01-61	81.0	224.3	
		6-01-62	86.3	219.0	
		7-01-62	80.8	224.5	
		8-01-62	83.0	222.3	
		9-01-62	86.4	218.9	
		10-01-62	87.6	217.7	
		11-01-62	86.7	218.6	
		12-01-62	86.6	218.7	
		1-01-63	86.1	219.2	
		2-01-63	86.0	219.3	
		3-01-63	86.9	218.4	
		4-01-63	88.0	217.3	
		5-01-63	87.4	217.9	
		6-01-63	89.1	216.2	
14S/20E-01D01 M	303.9	7-01-61	71.9	232.0	4200
		8-01-61	73.2	230.7	
		9-01-61	74.5	229.4	
		10-01-61	72.8	231.1	
		11-01-61	72.3	231.6	
		12-01-61	71.5	232.4	
		1-01-62	70.7	233.2	
		2-01-62	70.4	233.5	
		3-01-62	69.8	234.1	
		4-01-62	69.7	234.2	
		5-01-62	71.8	232.1	
		6-01-62	72.3	231.6	
CITY OF FRESNO		5-22.16			
14S/20E-01D01 M CONT.	303.9	7-01-62	75.3	228.6	4200
		8-01-62	76.9	227.0	
		9-01-62	77.8	226.1	
		10-01-62	75.9	228.0	
		11-01-62	75.0	228.9	
		12-01-62	75.0	228.9	
		1-01-63	74.8	229.1	
		2-01-63	73.9	230.0	
		3-01-63	73.8	230.1	
		4-01-63	74.0	229.9	
		5-01-63	73.7	230.2	
		6-01-63	75.8	228.1	
14S/20E-10M01 M	291.4	8-03-62	89.7	201.7	4200
		8-30-62	90.4	201.0	
		10-03-62	88.8	202.6	
		10-31-62	86.1	205.3	
		11-28-62	83.3	208.1	
		12-26-62	80.0	211.4	
		1-30-63	76.2	215.2	
		2-28-63	75.4*	216.0	
		4-03-63	75.9	215.5	
		5-02-63	75.4	216.0	
		5-29-63	76.3	215.1	
FRESNO SLOUGH AREA		5-22.17			
13S/15E-28H01 M	162.0	10-19-62	◻		6001
		2-07-63	◻		
13S/15E-35D02 M	165.5	7-19-61	67.6*	97.9	6001
		8-21-61	65.2*	100.3	
		9-18-61	50.0*	115.5	
		10-23-61	46.5*	119.0	
		11-21-61	38.0	127.5	
		12-18-61	26.8	138.7	
		1-16-62	30.9	134.6	
		2-27-62	32.6*	132.9	
		3-20-62	33.1*	132.4	
		4-23-62	52.4*	113.1	
		5-21-62	54.5*	111.0	
		6-18-62	58.6*	106.9	
		7-23-62	65.6*	99.9	
		8-23-62	69.6*	95.9	
		9-18-62	51.0*	114.5	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO SLOUGH AREA			5-22.17		
13S/15E-35D02 M CONT.	165.5	10-16-62	47.0*	118.5	6001
		11-21-62	33.2	132.3	
		12-19-62	31.3	134.2	
		1-23-63	34.8	130.7	
		2-07-63	43.0	122.5	
		3-27-63	53.9	111.6	
		4-23-63	37.5	128.0	
		5-22-63	41.9	123.6	
		6-25-63	59.9	105.6	
13S/16E-25J01 M	196.0	10-19-62	¤		6001
		10-20-62	#		
13S/17E-17A01 M	205.0	7-19-61	¤		6001
		8-21-61	¤		
		9-18-61	21.4	183.6	
		10-23-61	21.1	183.9	
		11-20-61	21.0	184.0	
		12-18-61	20.6	184.4	
		1-16-62	20.4	184.6	
		2-26-62	19.4	185.6	
		3-20-62	19.6	185.4	
		4-23-62	¤		
		5-21-62	20.2	184.8	
		6-18-62	21.3	183.7	
		7-23-62	20.1	184.9	
		8-22-62	20.8	184.2	
		9-18-62	20.0	185.0	
		10-16-62	19.9	185.1	
		11-21-62	19.7	185.3	
		12-19-62	19.5	185.5	
		1-23-63	19.6	185.4	
		2-11-63	19.5	185.5	
		3-25-63	20.1	184.9	
		4-23-63	19.9	185.1	
		5-22-63	20.7	184.3	
		6-24-63	20.1	184.9	
14S/15E-25H02 M	160.0	7-19-61	33.3	126.7	6001
		8-21-61	33.9	126.1	
		9-18-61	31.0	129.0	
		10-23-61	30.0	130.0	
		11-21-61	24.5	135.5	
		12-18-61	21.1	138.9	
		1-17-62	19.5	140.5	
FRESNO SLOUGH AREA			5-22.17		
14S/15E-25H02 M CONT.	160.0	2-26-62	19.1	140.9	6001
		3-20-62	19.2	140.8	
		4-23-62	22.6	137.4	
		5-21-62	24.1	135.9	
		6-18-62	26.3	133.7	
		7-24-62	27.6	132.4	
		8-22-62	28.5	131.5	
		9-18-62	28.2	131.8	
		10-16-62	25.3	134.7	
		11-21-62	21.5	138.5	
		12-19-62	20.6	139.4	
		1-23-63	19.3	140.7	
		2-26-63	20.9	139.1	
		3-25-63	23.8	136.2	
		4-23-63	23.0	137.0	
		5-22-63	23.8	136.2	
		6-24-63	26.3	133.7	
14S/16E-03C01 M	180.0	3-06-62	26.5	153.5	6001
		8-23-62	42.4	137.6	
		9-18-62	38.7	141.3	
		10-16-62	35.1	144.9	
		10-23-62	41.0	139.0	
		11-21-62	32.4	147.6	
		12-19-62	31.7	148.3	
		1-23-63	29.4	150.6	
		2-27-63	28.8	151.2	
		3-25-63	34.1	145.9	
		4-22-63	34.4	145.6	
		5-22-63	38.3	141.7	
		6-24-63	41.8	138.2	
14S/16E-08D01 M	165.0	7-19-61	35.2	129.8	6001
		8-21-61	¤		
		9-18-61	29.1	135.9	
		10-23-61	28.1	136.9	
		11-21-61	25.2	139.8	
		12-18-61	21.0	144.0	
		1-16-62	19.9	145.1	
		2-27-62	19.8	145.2	
		3-20-62	19.1	145.9	
		4-23-62	¤		
		5-21-62	30.6	134.4	
		6-18-62	30.3	134.7	
		7-23-62	34.2	130.8	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO SLOUGH AREA			5-22.17		
14S/16E-08D01 M CONT.	165.0	8-23-62	35.1	129.9	6001
		9-18-62	33.8	131.2	
		10-16-62	29.6	135.4	
		11-21-62	24.7	140.3	
		12-19-62	23.1	141.9	
		1-23-63	21.6	143.4	
		2-26-63	21.1	143.9	
		3-25-63	26.8	138.2	
		4-22-63	26.5	138.5	
		5-22-63	28.0	137.0	
		6-24-63	34.1	130.9	
14S/16E-10J01 M	180.0	7-19-61	36.6	143.4	6001
		8-21-61	37.3	142.7	
		9-18-61	37.7	142.3	
		10-23-61	39.9	140.1	
		11-21-61	38.7	141.3	
		12-18-61	37.9	142.1	
		1-17-62	37.0	143.0	
		2-26-62	37.1	142.9	
		3-20-62	37.4	142.6	
		4-23-62	38.0	142.0	
		5-21-62	39.7	140.3	
		6-18-62	40.0	140.0	
		7-23-62	41.1	138.9	
		8-22-62	42.2	137.8	
		9-18-62	□		
		10-16-62	41.9	138.1	
		11-21-62	41.2	138.8	
		12-19-62	41.0	139.0	
		1-23-63	39.6	140.4	
		2-27-63	□		
		3-25-63	40.0	140.0	
		4-22-63	□		
		5-01-63	#		
14S/16E-22N01 M	167.0	10-19-62	21.9	145.1	6001
		2-19-63	19.3	147.7	
14S/17E-25A01 M	211.0	10-23-62	89.9	121.1	6001
		2-25-63	78.4	132.6	
15S/16E-01L01 M	171.0	10-22-62	□		6001
		10-23-62	29.6	141.4	
		2-08-63	29.2	141.8	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO SLOUGH AREA			5-22.17		
15S/16E-12C03 M	171.0	7-20-61	20.2	150.8	6001
		8-21-61	17.9	153.1	
		9-19-61	15.9	155.1	
		10-23-61	17.6	153.4	
		11-20-61	17.5	153.5	
		12-19-61	18.7	152.3	
		1-17-62	19.3	151.7	
		2-27-62	19.9	151.1	
		3-20-62	20.8	150.2	
		4-23-62	20.5	150.5	
		5-21-62	21.8	149.2	
		6-18-62	22.3	148.7	
		7-24-62	22.3	148.7	
		8-22-62	22.5	148.5	
		9-18-62	22.7	148.3	
		10-16-62	22.1	148.9	
		11-21-62	22.3	148.7	
		12-19-62	22.6	148.4	
		1-23-63	23.1	147.9	
		2-25-63	23.9	147.1	
		3-25-63	24.1	146.9	
		4-23-63	23.7	147.3	
		5-22-63	24.3	146.7	
		6-24-63	25.4	145.6	
15S/16E-17L01 M	165.0	7-18-61	33.2	131.8	5000
		8-21-61	33.0	132.0	
		9-18-61	31.7	133.3	
		10-16-61	31.5	133.5	
		11-13-61	32.0	133.0	
		12-18-61	30.7	134.3	
		1-15-62	31.2	133.8	
		2-19-62	31.3	133.7	
		3-12-62	31.5	133.5	
		4-09-62	32.3	132.7	
		5-14-62	32.4	132.6	
		6-18-62	34.8	130.2	
		7-16-62	33.6	131.4	
		8-06-62	34.9	130.1	
		9-18-62	34.5	130.5	
		10-21-62	32.4	132.6	
		11-24-62	32.2	132.8	
		12-21-62	36.7	128.3	
		1-23-63	32.5	132.5	
		2-18-63	32.1	132.9	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO SLOUGH AREA		5-22.17			
15S/16E-17L01 M CONT.	165.0	3-19-63	32.7	132.3	5000
		4-21-63	33.1	131.9	
		5-20-63	34.3	130.7	
		6-17-63	□		
15S/17E-22R01 M	187.0	10-22-62	89.5	97.5	6001
		2-08-63	73.8	113.2	
15S/17E-34L02 M	182.0	10-19-62	□		6001
		10-20-62	#		
15S/17E-35N02 M	185.0	7-20-61	91.0	94.0	6001
		8-22-61	84.7	100.3	
		9-19-61	89.0	96.0	
		10-23-61	78.9	106.1	
		11-20-61	75.8	109.2	
		12-19-61	72.7	112.3	
		1-17-62	70.3	114.7	
		1-23-62	□		
		2-27-62	75.0	110.0	
		3-20-62	85.0	100.0	
		4-23-62	77.4	107.6	
		5-21-62	89.7*	95.3	
		6-18-62	90.7	94.3	
		7-24-62	95.7	89.3	
		8-22-62	97.6	87.4	
		9-18-62	94.8	90.2	
		10-16-62	84.4	100.6	
		11-21-62	79.7	105.3	
		12-19-62	79.9	105.1	
		2-15-63	80.5	104.5	
		3-25-63	93.0	92.0	
		4-23-63	81.4	103.6	
		5-22-63	94.7	90.3	
		6-25-63	99.1	85.9	
15S/18E-07A02 M	204.0	7-20-61	□		6001
		8-22-61	□		
		9-18-61	□		
		10-23-61	84.6	119.4	
		11-20-61	82.4	121.6	
		12-19-61	80.2	123.8	
		1-17-62	78.3	125.7	
		2-27-62	76.7	127.3	
		3-20-62	75.8	128.2	
FRESNO SLOUGH AREA		5-22.17			
15S/18E-07A02 M CONT.	204.0	4-23-62	□		6001
		5-21-62	80.5	123.5	
		6-18-62	79.5	124.5	
		7-24-62	84.3	119.7	
		8-23-62	87.2	116.8	
		9-18-62	□		
		10-16-62	□		
		11-21-62	89.0	115.0	
		12-19-62	86.3	117.7	
		1-23-63	□		
		2-13-63	83.4	120.6	
		3-25-63	□		
		4-23-63	86.5	117.5	
		5-22-63	88.4	115.6	
		6-25-63	□		
15S/18E-16G01 M	205.8	10-23-62	86.1	119.7	6001
		2-12-63	83.1	122.7	
		2-19-63	82.8	123.0	
15S/19E-29C01 M	227.3	7-29-61	91.9	135.4	5631
		8-29-61	94.7	132.6	
		10-30-61	88.4	138.9	
		12-02-61	88.2	139.1	
		12-29-61	84.8	142.5	
		1-30-62	83.5	143.8	
		2-27-62	82.7	144.6	
		4-11-62	88.1	139.2	
		5-01-62	104.4	122.9	
		5-29-62	104.0	123.3	
		7-02-62	95.3	132.0	
		7-26-62	95.7	131.6	
		8-29-62	98.4	128.9	
		9-26-62	96.7	130.6	
		10-25-62	108.1	119.2	
		11-29-62	125.2	102.1	
		12-29-62	DRY		
		1-31-63	DRY		
		2-26-63	DRY		
		3-28-63	DRY		
		4-29-63	DRY		
		5-29-63	DRY		
		6-26-63	DRY		
16S/17E-23N01 M	189.0	10-18-62	102.8	86.2	6001

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO SLOUGH AREA			5-22.17		
16S/17E-23N01 M CONT.	189.0	2-13-63	¤		6001
16S/18E-10A01 M	205.0	7-24-61	77.5	127.5	5050
		8-30-61	76.6	128.4	
		9-27-61	79.4	125.6	
		10-31-61	75.8	129.2	
		11-29-61	75.8	129.2	
		12-28-61	75.2	129.8	
		1-26-62	75.3	129.7	
		2-22-62	75.0	130.0	
		3-30-62	74.7	130.3	
		4-27-62	75.7	129.3	
		5-31-62	75.1	129.9	
		7-02-62	78.9	126.1	
		8-03-62	84.1	120.9	
		8-29-62	84.7	120.3	
		9-27-62	82.3	122.7	
		11-05-62	81.1	123.9	
		12-04-62	81.5	123.5	
		12-28-62	81.1	123.9	
		1-25-63	82.1	122.9	
		3-04-63	80.9	124.1	
		3-29-63	82.8	122.2	
		4-29-63	81.4	123.6	
		5-31-63	84.5	120.5	
		6-28-63	¤		
16S/18E-27C01 M	198.0	2-11-63	84.1	113.9	5000
		2-21-63	82.2	115.8	5050
16S/18E-31Q02 M	191.0	7-02-62	101.8	89.2	5050
		8-03-62	118.0	73.0	
		8-29-62	107.6	83.4	
		9-27-62	97.7	93.3	
		11-05-62	98.5	92.5	
		12-04-62	97.0	94.0	
		12-28-62	94.9	96.1	
		1-25-63	98.8	92.2	
		3-04-63	107.6	83.4	
		3-29-63	111.3	79.7	
		4-29-63	100.2	90.8	
		5-31-63	105.4	85.6	
		6-28-63	107.9	83.1	
16S/19E-34P01 M	220.0	7-24-61	¤		5050

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
FRESNO SLOUGH AREA			5-22.17		
16S/19E-34P01 M CONT.	220.0	8-29-61	¤		5050
		9-27-61	82.8	137.2	
		10-31-61	¤		
		11-29-61	90.6	129.4	
		12-28-61	78.6	141.4	
		1-26-62	66.8	153.2	
		3-05-62	71.6	148.4	
		3-30-62	80.9	139.1	
		4-27-62	81.2	138.8	
		5-31-62	84.6	135.4	
		7-02-62	¤		
		8-03-62	¤		
		8-29-62	76.0	144.0	
		9-27-62	87.3	132.7	
		11-05-62	83.0	137.0	
		12-04-62	93.0	127.0	
		12-28-62	¤		
		1-25-63	88.2	131.8	
		3-04-63	83.8	136.2	
		4-29-63	82.9	137.1	
		4-29-63	90.5	129.5	
		5-31-63	100.3	119.7	
		6-28-63	90.9	129.1	
17S/17E-12H01 M	199.0	2-20-63	137.8	61.2	5050
17S/18E-23A02 M	199.5	2-20-63	66.6	132.9	5050
CONSOLIDATED IRRIGATION DISTRICT			5-22.18		
14S/22E-22N01 M	355.7	7-05-62	36.8	318.9	4636
		8-04-62	35.8	319.9	
		9-05-62	35.0	320.7	
		10-05-62	35.9	319.8	
		11-05-62	35.4	320.3	
		12-04-62	35.4	320.3	
		1-04-63	35.8	319.9	
		2-06-63	36.1	319.6	
		3-04-63	35.9	319.8	
		4-09-63	36.2	319.5	
		5-02-63	36.2	319.5	
		6-04-63	36.5	319.2	
15S/19E-24N01 M	246.6	7-05-62	75.0	171.6	4636
		8-04-62	77.7	168.9	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CONSOLIDATED IRRIGATION DISTRICT		5-22.18			
15S/19E-24N01 M CONT.	246.6	9-05-62	77.0	169.6	4636
		10-05-62	75.1	171.5	
		11-05-62	76.1	170.5	
		12-04-62	75.4	171.2	
		1-04-63	73.6	173.0	
		2-06-63	71.5	175.1	
		3-04-63	70.4	176.2	
		4-09-63	81.0	165.6	
		5-02-63	75.8	170.8	
		6-04-63	75.8	170.8	
15S/20E-28A01 M	264.8	7-05-62	56.0	208.8	4636
		8-04-62	56.2	208.6	
		9-05-62	53.1	211.7	
		10-05-62	51.8	213.0	
		11-05-62	52.6	212.2	
		12-04-62	52.8	212.0	
		1-04-63	52.8	212.0	
		2-06-63	51.6	213.2	
		3-04-63	51.6	213.2	
		4-09-63	56.0	208.8	
		5-02-63	53.2	211.6	
		6-04-63	55.5	209.3	
15S/21E-15D01 M	301.2	7-05-62	36.5	264.7	4636
		8-04-62	36.9	264.3	
		9-05-62	36.6	264.6	
		10-05-62	36.1	265.1	
		11-05-62	35.3	265.9	
		12-04-62	35.9	265.3	
		1-04-63	34.9	266.3	
		2-06-63	34.7	266.5	
		3-04-63	34.4	266.8	
		4-09-63	34.7	266.5	
		5-02-63	35.5	265.7	
		6-04-63	35.6	265.6	
15S/22E-16A01 M	337.0	7-05-62	36.9	300.1	4636
		8-04-62	36.3	300.7	
		9-05-62	35.4	301.6	
		10-05-62	35.3	301.7	
		11-05-62	35.7	301.3	
		12-04-62	36.0	301.0	
		1-04-63	36.1	300.9	
		2-06-63	36.6	300.4	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CONSOLIDATED IRRIGATION DISTRICT		5-22.18			
15S/22E-16A01 M CONT.	337.0	3-04-63	36.5	300.5	4636
		4-09-63	37.2	299.8	
		5-02-63	38.4	298.6	
		6-04-63	37.2	299.8	
15S/22E-29D01 M	321.9	7-05-62	40.3	281.6	4636
		8-04-62	40.2	281.7	
		9-05-62	39.6	282.3	
		10-05-62	39.3	282.6	
		11-05-62	39.3	282.6	
		12-04-62	39.8	282.1	
		1-04-63	39.8	282.1	
		2-06-63	40.0	281.9	
		3-04-63	40.1	281.8	
		4-09-63	40.8	281.1	
		5-02-63	41.2	280.7	
		6-04-63	41.1	280.8	
16S/19E-14A01 M	235.5	7-05-62	83.0	152.5	4636
		8-04-62	84.8	150.7	
		9-05-62	83.6	151.9	
		10-05-62	79.1	156.4	
		11-05-62	77.5	158.0	
		12-04-62	76.5	159.0	
		1-04-63	75.8	159.7	
		2-06-63	74.5	161.0	
		3-04-63	73.8	161.7	
		4-09-63	81.2	154.3	
		5-02-63	78.5	157.0	
		6-04-63	81.4	154.1	
16S/20E-22N01 M	247.7	7-05-62	63.4	184.3	4636
		8-04-62	63.6	184.1	
		9-05-62	64.2	183.5	
		10-05-62	62.6	185.1	
		11-05-62	62.1	185.6	
		12-04-62	60.7	187.0	
		1-04-63	59.7	188.0	
		2-06-63	59.4	188.3	
		3-04-63	58.9	188.8	
		4-09-63	61.7	186.0	
		5-02-63	64.6	183.1	
		6-04-63	64.5	183.2	
16S/21E-22N01 M	271.0	7-05-62	54.1	216.9	4636

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CONSOLIDATED IRRIGATION DISTRICT			5-22.18		
16S/21E-22N01 M CDNT.	271.0	8-04-62	54.9	216.1	4636
		9-05-62	53.4	217.6	
		10-05-62	52.6	218.4	
		11-05-62	50.5	220.5	
		12-04-62	49.8	221.2	
		1-04-63	49.8	221.2	
		2-06-63	49.6	221.4	
		3-04-63	48.2	222.8	
		4-09-63	49.9	221.1	
		5-02-63	48.6	222.4	
		6-04-63	51.1	219.9	
6S/22E-23R01 M	297.5	7-05-62	33.3	264.2	4636
		8-04-62	32.3	265.2	
		9-05-62	31.9	265.6	
		10-05-62	32.0	265.5	
		11-05-62	31.9	265.6	
		12-04-62	31.8	265.7	
		1-04-63	31.8	265.7	
		2-06-63	31.5	266.0	
		3-04-63	31.4	266.1	
		4-09-63	31.3	266.2	
		5-02-63	31.3	266.2	
		6-04-63	31.3	266.2	
17S/22E-03C01 M	286.0	7-05-62	24.8	261.2	4636
		8-04-62	26.1	259.9	
		9-05-62	26.0	260.0	
		10-05-62	23.8	262.2	
		11-05-62	28.6	257.4	
		12-04-62	29.1	256.9	
		1-04-63	28.9	257.1	
		2-06-63	29.1	256.9	
		3-04-63	28.6	257.4	
		4-09-63	31.6	254.4	
		5-02-63	29.2	256.8	
		6-04-63	28.2	257.8	
ALTA IRRIGATION DISTRICT			5-22.19		
14S/23E-36R01 M	391.0	7-30-62	54.0	337.0	4637
		8-28-62	□		
		9-26-62	□		
		10-27-62	64.8	326.2	
		11-27-62	62.5	328.5	
ALTA IRRIGATION DISTRICT			5-22.19		
14S/23E-36R01 M CONT.	391.0	12-28-62	63.2	327.8	4637
		1-28-63	66.2	324.8	
		2-27-63	64.6	326.4	
		3-28-63	64.3	326.7	
		4-27-63	63.9	327.1	
		5-29-63	64.2	326.8	
		6-26-63	60.0	331.0	
14S/24E-31P01 M	395.0	7-30-62	46.8	348.2	4637
		8-28-62	49.8	345.2	
		9-26-62	59.8	335.2	
		10-27-62	60.0	335.0	
		11-27-62	64.2	330.8	
		12-28-62	62.3	332.7	
		1-29-63	63.3	331.7	
		2-27-63	62.0	333.0	
		3-28-63	61.6	333.4	
		4-27-63	61.1	333.9	
		5-29-63	60.0	335.0	
		6-26-63	57.2	337.8	
15S/23E-23A02 M	358.0	7-30-62	57.0	301.0	4637
		8-28-62	58.6	299.4	
		9-26-62	59.4	298.6	
		10-27-62	57.9	300.1	
		11-27-62	58.4	299.6	
		12-28-62	56.7	301.3	
		1-28-63	57.8	300.2	
		2-27-63	56.5	301.5	
		3-27-63	56.8	301.2	
		4-27-63	56.5	301.5	
		5-29-63	57.2	300.8	
		6-26-63	54.4	303.6	
15S/24E-22D01 M	388.0	7-27-62	41.6	346.4	4637
		8-30-62	47.8	340.2	
		9-28-62	54.2	333.8	
		10-30-62	55.8	332.2	
		11-29-62	58.0	330.0	
		12-31-62	59.1	328.9	
		1-28-63	60.2	327.8	
		3-01-63	56.0	332.0	
		3-30-63	55.9	332.1	
		5-02-63	52.5	335.5	
		5-30-63	49.4	338.6	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
ALTA IRRIGATION DISTRICT			5-22.19		
15S/24E-22D01 M CONT.	388.0	6-27-63	42.7	345.3	4637
16S/23E-23E01 M	314.0	7-31-62	35.9	278.1	4637
		8-29-62	36.1	277.9	
		9-26-62	33.7	280.3	
		10-29-62	33.5	280.5	
		11-28-62	33.4	280.6	
		12-29-62	33.5	280.5	
		1-28-63	33.7	280.3	
		2-28-63	33.6	280.4	
		3-28-63	35.8	278.2	
		5-01-63	34.8	279.2	
		5-29-63	34.8	279.2	
		6-25-63	35.0	279.0	
16S/24E-21J01 M	336.0	7-28-62	41.8	294.2	4637
		8-30-62	44.3	291.7	
		9-25-62	43.4	292.6	
		10-26-62	41.8	294.2	
		11-26-62	42.3	293.7	
		12-27-62	43.8	292.2	
		1-28-63	46.0	290.0	
		2-26-63	42.7	293.3	
		3-27-63	46.0	290.0	
		4-27-63	45.6	290.4	
		5-28-63	43.9	292.1	
		6-25-63	41.5	294.5	
16S/25E-29A01 M	364.0	7-28-62	58.7	305.3	4637
		8-30-62	66.7	297.3	
		9-25-62	¤		
		10-26-62	62.9	301.1	
		11-26-62	¤		
		12-29-62	¤		
		1-28-63	¤		
		2-26-63	60.0	304.0	
		3-27-63	64.3	299.7	
		4-27-63	63.8	300.2	
		5-28-63	58.2	305.8	
		6-25-63	55.6	308.4	
17S/22E-25A01 M	275.0	7-28-61	¤		4637
		8-30-61	45.2	229.8	
		9-28-61	39.7	235.3	
		10-28-61	36.4	238.6	
ALTA IRRIGATION DISTRICT			5-22.19		
17S/22E-25A01 M CONT.	275.0	11-27-61	35.6	239.4	4637
		12-28-61	33.2	241.8	
		1-27-62	32.4	242.6	
		2-26-62	31.8	243.2	
		3-28-62	31.6	243.4	
		4-30-62	¤		
		5-28-62	39.4	235.6	
		6-29-62	39.8	235.2	
		7-28-62	¤		
		8-29-62	¤		
		9-27-62	41.5	233.5	
		10-29-62	37.4	237.6	
		11-28-62	33.8	241.2	
		12-28-62	33.0	242.0	
		1-28-63	32.6	242.4	
		2-28-63	32.6	242.4	
		3-29-63	35.8	239.2	
		5-01-63	¤		
		5-31-63	37.4	237.6	
		6-27-63	¤		
17S/22E-25J01 M	275.0	7-28-61	34.4	240.6	4637
		8-30-61	34.9	240.1	
		9-28-61	34.1	240.9	
		10-28-61	33.0	242.0	
		11-27-61	32.9	242.1	
		12-28-61	32.4	242.6	
		1-27-62	32.0	243.0	
		2-26-62	31.3	243.7	
		3-28-62	31.0	244.0	
		4-30-62	32.7	242.3	
		5-31-62	32.5	242.5	
		6-29-62	33.8	241.2	
		7-31-62	35.3	239.7	
		8-29-62	35.8	239.2	
		9-27-62	34.1	240.9	
		10-29-62	33.1	241.9	
		11-28-62	32.6	242.4	
		12-28-62	32.2	242.8	
		1-28-63	32.2	242.8	
		2-28-63	32.4	242.6	
		3-29-63	34.7	240.3	
		5-01-63	33.9	241.1	
		5-31-63	34.5	240.5	
		6-27-63	35.7	239.3	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
ALTA IRRIGATION DISTRICT			5-22.19		
17S/24E-15A01 M	303.0	7-25-61	45.0	258.0	6001
		9-01-61	46.2	256.8	
		9-19-61	44.0	259.0	
		10-24-61	44.5	258.5	
		11-27-61	35.3	267.7	
		12-20-61	33.6	269.4	
		1-23-62	32.0	271.0	
		3-01-62	31.4	271.6	
		3-27-62	29.0	274.0	
		4-25-62	38.5	264.5	
		5-22-62	40.7	262.3	
		6-21-62	45.6	257.4	
		7-24-62	48.5	254.5	
		8-21-62	47.5	255.5	
		9-19-62	48.9	254.1	
		10-16-62	48.3	254.7	
		11-20-62	40.0	263.0	
		12-17-62	37.1	265.9	
		1-22-63	38.7	264.3	
		2-25-63	33.5	269.5	
		3-25-63	#		
17S/25E-10C01 M	335.0	7-26-62	48.0	287.0	4637
		8-27-62	50.0	285.0	
		9-25-62	51.1	283.9	
		10-26-62	51.9	283.1	
		11-26-62	51.6	283.4	
		12-27-62	51.6	283.4	
		1-28-63	52.5	282.5	
		2-26-63	51.1	283.9	
		3-27-63	50.9	284.1	
		4-25-63	49.9	285.1	
		5-29-63	49.6	285.4	
		6-26-63	47.5	287.5	
17S/25E-18R01 M	321.0	7-26-62	69.7	251.3	4637
		8-27-62	71.4	249.6	
		9-25-62	71.0	250.0	
		10-26-62	68.0	253.0	
		11-26-62	66.5	254.5	
		12-27-62	65.3	255.7	
		1-28-63	65.3	255.7	
		2-26-63	64.4	256.6	
		3-27-63	66.5	254.5	
		4-25-63	67.3	253.7	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
ALTA IRRIGATION DISTRICT			5-22.19		
17S/25E-18R01 M CONT.	321.0	5-27-63	66.6	254.4	4637
		6-27-63	67.9	253.1	
LOWER KINGS RIVER AREA			5-22.20		
17S/19E-14J02 M	220.0	2-18-63	63.4	156.6	5000
		2-20-63	¤		5050
17S/20E-20D01 M	223.0	7-24-61	93.0*	130.0	5050
		8-30-61	71.4	151.6	
		9-27-61	94.4*	128.6	
		11-01-61	89.7*	133.3	
		11-29-61	59.2	163.8	
		12-28-61	57.5	165.5	
		1-26-62	56.6	166.4	
		3-05-62	55.5	167.5	
		3-30-62	91.7*	131.3	
		4-27-62	61.1	161.9	
		5-31-62	59.3	163.7	
		7-02-62	60.1	162.9	
		8-03-62	63.6	159.4	
		8-29-62	¤		
		9-27-62	65.7	157.3	
		11-05-62	59.9	163.1	
		12-04-62	53.9	169.1	
		12-28-62	55.9	167.1	
		1-25-63	56.0	167.0	
		3-04-63	86.8*	136.2	
		3-29-63	62.5	160.5	
		4-29-63	61.4	161.6	
		5-31-63	64.9	158.1	
		6-28-63	91.2*	131.8	
17S/21E-11G01 M	257.2	7-02-62	45.6	211.6	5050
		8-03-62	46.0	211.2	
		8-29-62	¤		
		9-27-62	42.0	215.2	
		11-05-62	40.9	216.3	
		12-04-62	40.0	217.2	
		12-28-62	39.2	218.0	
		1-25-63	¤		
		3-04-63	¤		
		3-28-63	42.0	215.2	
		4-29-63	37.4	219.8	
		5-31-63	38.9	218.3	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LOWER KINGS RIVER AREA			5-22.20		
17S/21E-11G01 M CONT.	257.2	6-28-63	□		5050
18S/18E-12N02 M	221.0	7-02-62	DRY		5050
		8-03-62	DRY		
		8-29-62	DRY		
		8-30-62	#		
18S/19E-26E01 M	210.0	2-20-63	6.2	203.8	5050
18S/20E-16A01 M	230.0	2-21-63	10.4	219.6	5050
18S/21E-10R01 M	254.0	7-02-62	66.8	187.2	5050
		8-03-62	75.6	178.4	
		8-29-62	78.6	175.4	
		9-27-62	68.3	185.7	
		11-05-62	63.1	190.9	
		12-04-62	58.2	195.8	
		12-28-62	57.3	196.7	
		1-25-63	63.0	191.0	
		2-14-63	58.6	195.4	
		3-04-63	□		
		3-28-63	73.2	180.8	
		4-29-63	64.4	189.6	
		5-31-63	68.4	185.6	
		6-28-63	75.7	178.3	
19S/19E-25A01 M	208.0	2-21-63	4.5	203.5	5050
19S/20E-21A01 M	217.0	7-02-62	70.5	146.5	5050
		8-03-62	75.9	141.1	
		8-30-62	77.5	139.5	
		9-27-62	78.6	138.4	
		11-05-62	73.7	143.3	
		12-04-62	71.3	145.7	
		12-28-62	69.8	147.2	
		1-25-63	76.5	140.5	
		2-21-63	71.1	145.9	
		3-04-63	69.1	147.9	
		3-29-63	73.8	143.2	
		4-29-63	75.6	141.4	
		5-31-63	76.9	140.1	
		6-28-63	77.1	139.9	
20S/20E-09C01 M	206.0	2-20-63	4.9	201.1	5050
20S/21E-03A01 M	220.0	2-19-63	18.2	201.8	6001

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LOWER KINGS RIVER AREA			5-22.20		
20S/22E-19M01 M	211.0	7-24-61	30.7	180.3	5050
		8-30-61	32.5	178.5	
		9-27-61	31.5	179.5	
		11-01-61	34.5	176.5	
		11-29-61	31.1	179.9	
		12-28-61	□		
		1-26-62	30.7	180.3	
		3-06-62	29.1	181.9	
		3-30-62	30.2	180.8	
		4-27-62	29.2	181.8	
		5-31-62	30.3	180.7	
		7-02-62	30.1	180.9	
		8-03-62	30.5	180.5	
		8-30-62	30.4	180.6	
		9-27-62	31.2	179.8	
		11-05-62	30.4	180.6	
		12-04-62	30.1	180.9	
		12-28-62	27.0	184.0	
		1-25-63	29.9	181.1	
		3-04-63	30.8	180.2	
		3-29-63	30.3	180.7	
		4-29-63	30.6	180.4	
		5-31-63	30.2	180.8	
		6-28-63	30.2	180.8	
ORANGE COVE IRRIGATION DISTRICT			5-22.21		
14S/24E-20B01 M	443.0	7-25-62	15.3	427.7	6001
		8-21-62	13.2	429.8	
		9-19-62	12.8	430.2	
		10-16-62	13.8	429.2	
		11-20-62	15.3	427.7	
		12-17-62	16.4	426.6	
		2-04-63	17.5	425.5	
		3-05-63	16.8	426.2	
		4-03-63	16.3	426.7	
		5-02-63	15.5	427.5	
		6-03-63	13.8	429.2	
14S/25E-30D01 M	510.0	10-10-62	32.3	477.7	6001
		2-07-63	32.3	477.7	
		2-12-63	31.8	478.2	
15S/24E-14D01 M	405.0	7-25-62	37.1	367.9	6001
		8-21-62	36.0	369.0	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
ORANGE COVE IRRIGATION DISTRICT		5-22.21			
15S/24E-14D01 M CONT.	405.0	9-19-62	33.8	371.2	6001
		10-16-62	32.8	372.2	
		11-20-62	34.1	370.9	
		12-17-62	32.7	372.3	
		2-04-63	33.1	371.9	
		3-05-63	31.9	373.1	
		4-03-63	31.1	373.9	
		5-02-63	30.1	374.9	
		6-04-63	31.5	373.5	
16S/25E-04C02 M	415.0	7-25-62	16.5	398.5	6001
		8-21-62	17.6	397.4	
		9-19-62	16.8	398.2	
		10-16-62	16.7	398.3	
		11-20-62	17.3	397.7	
		12-17-62	17.4	397.6	
		2-04-63	18.6	396.4	
		3-05-63	18.1	396.9	
		4-04-63	18.0	397.0	
		5-03-63	17.2	397.8	
		6-05-63	16.6	398.4	
STONE CORRAL IRRIGATION DISTRICT		5-22.22			
16S/26E-32R01 M	405.0	7-24-62	2.3	402.7	6001
		8-20-62	2.6	402.4	
		9-19-62	2.3	402.7	
		10-16-62	2.3	402.7	
		11-20-62	2.3	402.7	
		12-17-62	3.0	402.0	
		1-22-63	2.6	402.4	
		2-05-63	.8	404.2	
		2-25-63	1.0	404.0	
		3-26-63	1.2	403.8	
		4-22-63	.8	404.2	
		5-21-63	1.3	403.7	
		6-28-63	1.9	403.1	
17S/26E-07R01 M	364.0	7-25-62	24.0	340.0	6001
		8-20-62	30.7	333.3	
		9-19-62	24.0	340.0	
		10-16-62	21.7	342.3	
		11-20-62	21.1	342.9	
		12-17-62	21.0	343.0	
		1-22-63	25.8	338.2	
STONE CORRAL IRRIGATION DISTRICT		5-22.22			
17S/26E-07R01 M CONT.	364.0	2-25-63	22.2	341.8	6001
		3-26-63	20.3	343.7	
		4-22-63	19.8	344.2	
		5-21-63	19.4	344.6	
		6-28-63	18.3	345.7	
IVANHOE IRRIGATION DISTRICT		5-22.23			
17S/25E-27R01 M	350.0	8-01-61	93.0	257.0	6001
		8-31-61	105.0	245.0	
		9-29-61	105.9	244.1	
		10-31-61	90.5	259.5	
		12-01-61	89.4	260.6	
		1-02-62	87.6	262.4	
		1-31-62	86.2	263.8	
		2-28-62	86.2	263.8	
		4-05-62	85.4	264.6	
		5-01-62	92.0	258.0	
		5-31-62	95.0	255.0	
		6-10-62	102.5	247.5	
		8-01-62	103.1	246.9	
		8-31-62	99.2	250.8	
		10-03-62	91.2	258.8	
		10-31-62	89.0	261.0	
		12-05-62	87.9	262.1	
		1-03-63	¤		
		2-04-63	87.2	262.8	
		3-04-63	86.4	263.6	
		4-01-63	85.9	264.1	
		5-01-63	85.6	264.4	
		6-06-63	87.0	263.0	
17S/25E-35M01 M	349.0	7-25-61	¤		6001
		8-31-61	83.5	265.5	
		9-19-61	84.1	264.9	
		9-29-61	84.3	264.7	
		10-24-61	84.8	264.2	
		10-31-61	84.7	264.3	
		11-27-61	83.1	265.9	
		12-01-61	84.3	264.7	
		1-02-62	83.6	265.4	
		1-23-62	83.5	265.5	
		2-28-62	82.5	266.5	
		4-05-62	82.0	267.0	
		4-26-62	81.4	267.6	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
IVANHOE IRRIGATION DISTRICT			5-22.23		
17S/25E-35M01 M CONT.	349.0	5-23-62	83.2	265.8	6001
		6-21-62	81.7	267.3	
		7-25-62	82.9	266.1	
		8-21-62	84.0	265.0	
		9-19-62	84.6	264.4	
		10-16-62	84.7	264.3	
		11-20-62	85.0	264.0	
		12-17-62	87.7	261.3	
		1-03-63	83.7	265.3	
		2-04-63	83.3	265.7	
		3-04-63	82.5	266.5	
		4-01-63	81.8	267.2	
		5-01-63	81.2	267.8	
		6-06-63	¤		
17S/25E-36G01 M	365.0	8-01-61	93.9	271.1	6001
		8-31-61	96.9	268.1	
		9-29-61	92.9	272.1	
		10-31-61	89.0	276.0	
		12-01-61	86.9	278.1	
		1-02-62	84.7	280.3	
		1-31-62	83.5	281.5	
		2-28-62	86.5	278.5	
		4-05-62	78.3	286.7	
		5-01-62	78.8	286.2	
		5-31-62	78.5	286.5	
		6-10-62	79.5	285.5	
		8-01-62	79.8	285.2	
		8-31-62	79.4	285.6	
		10-03-62	79.5	285.5	
		10-31-62	78.5	286.5	
		12-05-62	80.3	284.7	
		1-03-63	80.9	284.1	
		2-04-63	80.4	284.6	
		3-04-63	77.6	287.4	
		4-01-63	76.5	288.5	
		5-01-63	75.0	290.0	
		6-06-63	75.2	289.8	
17S/26E-21E01 M	394.0	8-01-61	41.7	352.3	6001
		8-31-61	42.9	351.1	
		9-29-61	42.0	352.0	
		10-31-61	36.5	357.5	
		12-01-61	36.1	357.9	
		1-02-62	36.2	357.8	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
IVANHOE IRRIGATION DISTRICT			5-22.23		
17S/26E-21E01 M CONT.	394.0	2-28-62	40.0	354.0	6001
		4-05-62	38.9	355.1	
		5-02-62	33.0	361.0	
		6-01-62	21.9	372.1	
		6-10-62	24.0	370.0	
		8-01-62	23.0	371.0	
		9-04-62	24.2	369.8	
		10-03-62	21.6	372.4	
		10-31-62	22.2	371.8	
		12-05-62	22.5	371.5	
		1-04-63	26.1	367.9	
		2-05-63	25.1	368.9	
		3-04-63	25.0	369.0	
		4-01-63	24.1	369.9	
		5-02-63	23.6	370.4	
		6-10-63	22.0	372.0	
17S/26E-32N01 M	385.0	8-01-61	77.8	307.2	6001
		8-31-61	79.9	305.1	
		9-29-61	77.9	307.1	
		10-31-61	78.1	306.9	
		12-01-61	78.0	307.0	
		1-02-62	80.4	304.6	
		1-31-62	78.0	307.0	
		2-28-62	77.2	307.8	
		4-05-62	76.0	309.0	
		5-02-62	75.9	309.1	
		6-01-62	76.6	308.4	
		6-10-62	75.0	310.0	
		8-01-62	75.2	309.8	
		9-04-62	74.4	310.6	
		10-03-62	74.1	310.9	
		10-31-62	73.7	311.3	
		12-06-62	74.9	310.1	
		1-04-63	74.2	310.8	
		2-05-63	73.8	311.2	
		3-04-63	73.0	312.0	
		4-02-63	72.1	312.9	
		5-02-63	71.0	314.0	
		6-10-63	70.4	314.6	
17S/26E-34D01 M	416.0	8-01-61	82.9	333.1	6001
		8-31-61	85.0	331.0	
		9-21-61	83.2	332.8	
		10-31-61	81.3	334.7	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
IVANHOE IRRIGATION DISTRICT			5-22.23		
17S/26E-34D01 M CONT.	416.0	12-01-61	79.2	336.8	6001
		1-02-62	76.9	339.1	
		1-31-62	76.0	340.0	
		2-28-62	73.9	342.1	
		4-05-62	70.0	346.0	
		5-01-62	70.0	346.0	
		6-01-62	70.5	345.5	
		6-10-62	71.5	344.5	
		8-01-62	70.4	345.6	
		9-04-62	69.3	346.7	
		10-03-62	67.3	348.7	
		10-31-62	67.2	348.8	
		12-06-62	66.3	349.7	
		1-04-63	66.4	349.6	
		2-05-63	68.0	348.0	
		3-04-63	64.8	351.2	
		4-02-63	62.8	353.2	
		5-02-63	60.0	356.0	
		6-10-63	65.5	350.5	
8S/25E-12Q01 M	363.0	10-12-62	66.0	297.0	6001
		2-13-63	46.7	316.3	5050
		2-25-63	55.8	307.2	6001
KAWEAH DELTA WATER CONSERV DIST			5-22.24		
17S/24E-34B01 M	297.5	7-25-61	50.7	246.8	6001
		8-31-61	54.0	243.5	
		9-19-61	55.1	242.4	
		10-24-61	51.9	245.6	
		11-27-61	53.1	244.4	
		12-20-61	49.1	248.4	
		1-23-62	48.3	249.2	
		2-28-62	46.9	250.6	
		3-27-62	46.3	251.2	
		4-25-62	39.9	257.6	
		5-22-62	37.5	260.0	
		6-19-62	37.5	260.0	
		7-24-62	32.8	264.7	
		8-21-62	34.5	263.0	
		9-19-62	35.7	261.8	
		10-16-62	36.0	261.5	
		11-20-62	35.0	262.5	
		12-17-62	35.0	262.5	
		1-22-63	37.2	260.3	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KAWEAH DELTA WATER CONSERV DIST			5-22.24		
17S/24E-34B01 M CONT.	297.5	2-25-63	35.0	262.5	6001
		3-25-63	35.5	262.0	
		4-22-63	◻		
		5-21-63	24.9	272.6	
		6-28-63	17.6	279.9	
17S/25E-21A01 M	335.0	7-25-61	105.7	229.3	6001
		8-31-61	107.1	227.9	
		9-19-61	102.8	232.2	
		10-24-61	96.7	238.3	
		11-27-61	101.3	233.7	
		12-18-61	87.6	247.4	
		1-22-62	85.2	249.8	
		3-01-62	83.8	251.2	
		3-28-62	84.6	250.4	
		4-26-62	86.2	248.8	
		5-23-62	89.7	245.3	
		6-21-62	95.5	239.5	
		7-25-62	◻		
		8-21-62	99.5	235.5	
		9-19-62	105.5	229.5	
		10-16-62	102.2	232.8	
		11-20-62	109.0	226.0	
		12-17-62	109.5	225.5	
		1-22-63	102.9	232.1	
		2-25-63	94.5	240.5	
		3-25-63	102.5	232.5	
		4-22-63	97.4	237.6	
		5-21-63	113.0	222.0	
		6-28-63	104.5	230.5	
17S/26E-17P02 M	385.0	10-10-62	19.6	365.4	6001
		2-04-63	22.9	362.1	
17S/27E-34P01 M	470.0	10-11-62	10.7	459.3	6001
		2-05-63	12.8	457.2	
18S/22E-29A01 M	251.0	10-10-62	78.0	173.0	6001
		2-04-63	72.3	178.7	
18S/22E-36P01 M	245.0	7-26-61	96.0	149.0	6001
		8-31-61	99.4	145.6	
		9-20-61	99.0	146.0	
		10-25-61	97.7	147.3	
		11-28-61	94.8	150.2	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KAWEAH DELTA WATER CONSERV DIST			5-22.24		
18S/22E-36P01 M CONT.	245.0	12-20-61	92.4	152.6	6001
		1-25-62	88.9	156.1	
		2-28-62	88.5	156.5	
		3-27-62	83.4	161.6	
		4-23-62	88.8	156.2	
		5-22-62	88.1	156.9	
		6-19-62	89.4	155.6	
		7-23-62	93.2	151.8	
		8-21-62	97.4	147.6	
		9-18-62	97.9	147.1	
		10-15-62	95.8	149.2	
		11-19-62	90.7	154.3	
		12-17-62	87.1	157.9	
		1-21-63	86.5	158.5	
		2-25-63	86.0	159.0	
		3-25-63	88.2	156.8	
		4-22-63	¤		
		5-20-63	¤		
		6-27-63	89.2	155.8	
18S/23E-12H01 M	282.5	7-25-61	62.7	219.8	6001
		8-30-61	65.5	217.0	
		9-20-61	65.0	217.5	
		10-24-61	63.4	219.1	
		11-27-61	59.3	223.2	
		12-20-61	58.6	223.9	
		1-25-62	56.8	225.7	
		2-28-62	55.3	227.2	
		3-27-62	56.5	226.0	
		4-25-62	56.2	226.3	
		5-22-62	57.5	225.0	
		6-19-62	60.0	222.5	
		7-23-62	64.0	218.5	
		8-21-62	67.9	214.6	
		9-18-62	68.8	213.7	
		10-15-62	65.6	216.9	
		11-19-62	60.5	222.0	
		12-17-62	57.8	224.7	
		1-21-63	57.3	225.2	
		2-25-63	55.5	227.0	
		3-25-63	58.0	224.5	
		4-22-63	56.6	225.9	
		5-20-63	56.5	226.0	
		6-27-63	58.0	224.5	
18S/23E-34A01 M	271.0	2-13-63	88.2	182.8	5050

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KAWEAH DELTA WATER CONSERV DIST			5-22.24		
18S/24E-26A01 M	312.5	10-12-62	71.2	241.3	6001
		2-18-63	69.3	243.2	
18S/25E-33F01 M	338.0	10-11-62	54.2	283.8	6001
		2-23-63	¤		
18S/26E-27E01 M	390.0	10-12-62	26.5	363.5	6001
		2-25-63	25.1	364.9	
18S/26E-30N01 M	367.0	7-25-61	41.3	325.7	6001
		8-30-61	42.6	324.4	
		9-20-61	42.3	324.7	
		10-25-61	41.5	325.5	
		11-29-61	42.4	324.6	
		12-19-61	41.6	325.4	
		1-23-62	41.7	325.3	
		3-01-62	39.5	327.5	
		3-28-62	36.2	330.8	
		4-26-62	34.5	332.5	
		5-23-62	30.5	336.5	
		6-20-62	30.9	336.1	
		7-24-62	29.5	337.5	
		8-23-62	31.8	335.2	
		9-19-62	30.2	336.8	
		10-16-62	29.9	337.1	
		11-20-62	31.1	335.9	
		12-18-62	32.5	334.5	
		1-22-63	32.9	334.1	
		2-26-63	31.1	335.9	
		3-26-63	30.5	336.5	
		4-22-63	27.3	339.7	
		5-20-63	27.7	339.3	
		6-28-63	26.8	340.2	
19S/22E-01N02 M	245.0	2-19-63	69.8	175.2	6001
19S/22E-19A01 M	235.0	7-26-61	137.1	97.9	6001
		8-31-61	140.3	94.7	
		9-20-61	139.7	95.3	
		10-25-61	139.8	95.2	
		11-28-61	134.0	101.0	
		12-20-61	129.8	105.2	
		1-23-62	125.9	109.1	
		2-28-62	128.9	106.1	
		3-27-62	125.0	110.0	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KAWEAH DELTA WATER CONSERV DIST			5-22.24		
19S/22E-19A01 M CONT.	235.0	4-23-62	121.0	114.0	6001
		5-22-62	118.4	116.6	
		6-19-62	116.5	118.5	
		7-23-62	102.7	132.3	
		8-21-62	99.5	135.5	
		9-19-62	100.3	134.7	
		10-15-62	98.0	137.0	
		11-19-62	96.3	138.7	
		12-17-62	92.1	142.9	
		1-21-63	90.0	145.0	
		2-25-63	90.2	144.8	
		3-25-63	95.0	140.0	
		4-22-63	91.4	143.6	
		5-20-63	90.2	144.8	
		6-27-63	89.1	145.9	
19S/22E-36E01 M	234.0	7-23-62	103.6	130.4	6001
		8-22-62	102.7	131.3	
		9-18-62	103.8	130.2	
		10-15-62	104.3	129.7	
		11-19-62	104.4	129.6	
		12-17-62	104.5	129.5	
		1-21-63	104.5	129.5	
		2-19-63	104.7	129.3	
		2-25-63	104.5	129.5	
		3-25-63	104.3	129.7	
		4-22-63	105.3	128.7	
		5-20-63	105.1	128.9	
		6-27-63	105.8	128.2	
19S/25E-07K01 M	320.0	7-25-61	60.9	259.1	6001
		8-31-61	64.0	256.0	
		9-19-61	64.8	255.2	
		10-26-61	65.0	255.0	
		11-27-61	65.3	254.7	
		12-19-61	65.2	254.8	
		1-24-62	65.5	254.5	
		2-28-62	64.2	255.8	
		3-27-62	61.5	258.5	
		4-25-62	58.7	261.3	
		5-22-62	51.0	269.0	
		6-19-62	45.8	274.2	
		7-24-62	48.3	271.7	
		8-23-62	49.2	270.8	
		9-19-62	48.9	271.1	
KAWEAH DELTA WATER CONSERV DIST			5-22.24		
19S/25E-07K01 M CONT.	320.0	10-15-62	49.3	270.7	6001
		11-19-62	51.8	268.2	
		12-18-62	52.9	267.1	
		1-21-63	54.2	265.8	
		2-25-63	54.4	265.6	
		3-26-63	55.6	264.4	
		4-22-63	54.8	265.2	
		5-20-63	52.1	267.9	
		6-28-63	42.9	277.1	
19S/25E-25D01 M	337.0	2-13-63	72.1	264.9	5050
19S/26E-34R02 M	341.0	7-25-61	¤		6001
		9-01-61	157.5	183.5	
		9-20-61	144.8	196.2	
		10-25-61	130.0	211.0	
		11-29-61	124.1	216.9	
		12-19-61	117.6	223.4	
		1-23-62	116.4	224.6	
		3-01-62	104.0	237.0	
		3-28-62	¤		
		4-25-62	123.2	217.8	
		5-23-62	126.5	214.5	
		6-20-62	¤		
		7-24-62	¤		
		8-23-62	¤		
		9-19-62	¤		
		10-16-62	111.0	230.0	
		11-20-62	¤		
		12-18-62	119.3	221.7	
		1-22-63	113.6	227.4	
		2-26-63	102.7	238.3	
		3-26-63	¤		
		4-22-63	93.4	247.6	
		5-20-63	¤		
		6-28-63	120.2	220.8	
20S/22E-10C01 M	226.0	2-19-63	121.2	104.8	6001
20S/25E-14F01 M	304.5	7-25-61	106.9	197.6	6001
		8-30-61	111.0	193.5	
		9-20-61	101.6	202.9	
		10-25-61	98.9	205.6	
		11-28-61	89.5	215.0	
		12-21-61	86.7	217.8	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KAWEAH DELTA WATER CONSERV DIST			5-22.24		
20S/25E-14F01 M	304.5	1-25-62	84.6	219.9	6001
CONT.		2-28-62	84.2	220.3	
		3-28-62	84.0	220.5	
		4-25-62	95.1	209.4	
		5-22-62	87.5	217.0	
		6-19-62	93.5	211.0	
		7-24-62	105.7	198.8	
		8-22-62	108.5	196.0	
		9-18-62	97.5	207.0	
		10-15-62	91.7	212.8	
		11-19-62	87.5	217.0	
		12-18-62	84.8	219.7	
		1-21-63	86.0	218.5	
		2-26-63	92.0	212.5	
		3-26-63	91.0	213.5	
		4-22-63	81.7	222.8	
		5-20-63	86.6	217.9	
		6-27-63	98.4	206.1	
TULARE IRRIGATION DISTRICT			5-22.25		
9S/23E-14R01 M	270.0	10-10-62	◻		6001
		2-20-63	90.8	179.2	
		5-20-63	107.0	163.0	
		6-27-63	89.0	181.0	
19S/23E-32H01 M	250.5	10-10-62	107.9	142.6	6001
		2-20-63	104.0	146.5	
19S/24E-16P01 M	290.0	7-24-62	110.3	179.7	6001
		8-22-62	◻		
		9-18-62	95.5	194.5	
		10-15-62	91.3	198.7	
		11-19-62	90.7	199.3	
		12-18-62	88.1	201.9	
		1-21-63	91.7	198.3	
		2-04-63	85.6	204.4	
		2-25-63	87.0	203.0	
		3-26-63	108.0	182.0	
		4-22-63	107.6	182.4	
		5-20-63	99.6	190.4	
		6-27-63	98.2	191.8	
19S/24E-27Q01 M	290.0	5-20-63	92.5	197.5	6001
		6-27-63	99.4	190.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
TULARE IRRIGATION DISTRICT			5-22.25		
19S/25E-17J01 M	327.0	10-02-61	◻		6001
		2-07-62	69.3	257.7	
		10-08-62	57.9	269.1	
		2-05-63	59.2	267.8	
		3-21-63	◻		
		6-28-63	◻		
20S/23E-08B02 M	241.0	7-26-61	112.1	128.9	6001
		8-31-61	114.3	126.7	
		9-20-61	115.4	125.6	
		10-25-61	125.4*	115.6	
		11-28-61	112.9	128.1	
		12-20-61	112.0	129.0	
		1-23-62	110.7	130.3	
		2-28-62	109.7	131.3	
		3-27-62	109.6	131.4	
		4-23-62	123.5*	117.5	
		5-22-62	111.5	129.5	
		6-19-62	126.0*	115.0	
		7-23-62	115.2	125.8	
		8-22-62	117.0	124.0	
		9-18-62	129.9	111.1	
		10-15-62	114.1	126.9	
		11-19-62	111.5	129.5	
		12-17-62	109.6	131.4	
		1-21-63	109.2	131.8	
		2-25-63	107.7	133.3	
		3-25-63	110.5	130.5	
		4-22-63	111.0	130.0	
		5-20-63	110.1	130.9	
		6-27-63	125.7	115.3	
20S/23E-08G01 M	241.0	7-26-61	117.4	123.6	6001
		8-31-61	115.3	125.7	
		9-20-61	116.2	124.8	
		10-25-61	◻		
		11-28-61	117.0	124.0	
		12-27-61	114.9	126.1	
		1-23-62	112.0	129.0	
		2-28-62	111.0	130.0	
		3-27-62	110.8	130.2	
		4-23-62	◻		
		5-22-62	113.3	127.7	
		6-19-62	◻		
		7-23-62	116.6	124.4	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
TULARE IRRIGATION DISTRICT			5-22.25		
20S/23E-08G01 M CONT.	241.0	8-22-62	118.6	122.4	6001
		9-18-62	□		
		10-15-62	115.7	125.3	
		11-19-62	112.8	128.2	
		12-17-62	111.0	130.0	
		1-21-63	110.3	130.7	
		2-01-63	#		
20S/24E-16H01 M	273.0	10-05-61	108.4	164.6	6001
		2-09-62	93.2	179.8	
		10-10-62	105.3	167.7	
		2-06-63	93.0	180.0	
		5-20-63	98.9	174.1	
		6-27-63	113.1	159.9	
20S/24E-30J02 M	250.0	7-26-61	□		6001
		8-31-61	□		
		9-20-61	□		
		10-25-61	97.9	152.1	
		11-28-61	96.8	153.2	
		12-20-61	95.5	154.5	
		1-25-62	86.7	163.3	
		2-28-62	95.9	154.1	
		3-27-62	98.1	151.9	
		4-23-62	□		
		5-22-62	□		
		6-19-62	□		
		7-23-62	□		
		8-22-62	□		
		9-18-62	□		
		10-15-62	99.4	150.6	
		11-19-62	97.8	152.2	
		12-17-62	107.3	142.7	
		1-21-63	□		
		2-25-63	105.4	144.6	
		3-25-63	96.9	153.1	
		4-22-63	□		
		5-20-63	□		
		6-27-63	□		
21S/23E-05R01 M	222.0	10-03-61	101.4	120.6	6001
		2-07-62	99.9	122.1	
		10-09-62	101.9	120.1	
		2-08-63	97.7	124.3	
		5-21-63	99.2	122.8	
TULARE IRRIGATION DISTRICT			5-22.25		
21S/23E-05R01 M CONT.	222.0	6-28-63	100.1	121.9	6001
EXETER IRRIGATION DISTRICT			5-22.26		
18S/26E-25K01 M	436.0	7-25-61	76.0	360.0	6001
		8-30-61	76.9	359.1	
		9-20-61	74.8	361.2	
		10-25-61	78.8	357.2	
		11-29-61	78.4	357.6	
		12-19-61	76.0	360.0	
		1-23-62	74.7	361.3	
		3-01-62	70.1	365.9	
		3-28-62	68.2	367.8	
		4-26-62	68.5	367.5	
		5-23-62	75.6	360.4	
		6-20-62	66.6	369.4	
		7-24-62	66.8	369.2	
		8-23-62	66.6	369.4	
		9-19-62	66.8	369.2	
		10-16-62	66.3	369.7	
		11-20-62	65.7	370.3	
		12-18-62	67.1	368.9	
		1-22-63	64.3	371.7	
		2-26-63	59.7	376.3	
		3-25-63	59.0	377.0	
		4-22-63	57.7	378.3	
		5-20-63	59.9	376.1	
		6-28-63	57.4	378.6	
18S/27E-29D01 M	447.0	7-24-62	36.8	410.2	6001
		8-23-62	41.0	406.0	
		9-19-62	38.3	408.7	
		10-16-62	36.7	410.3	
		11-20-62	41.7	405.3	
		12-18-62	36.1	410.9	
		1-22-63	43.0	404.0	
		2-06-63	36.5	410.5	
		2-25-63	37.7	409.3	
		3-26-63	37.0	410.0	
		4-22-63	31.1	415.9	
		5-20-63	35.1	411.9	
		6-28-63	29.3	417.7	
19S/26E-14E01 M	375.0	7-25-61	□		6001
		8-30-61	140.6	234.4	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
EXETER IRRIGATION DISTRICT			5-22.26		
19S/26E-14E01 M CONT.	375.0	9-20-61	135.5	239.5	6001
		10-25-61	124.9	250.1	
		11-29-61	119.7	255.3	
		12-27-61	117.2	257.8	
		1-23-62	113.0	262.0	
		3-01-62	112.6	262.4	
		3-28-62	112.1	262.9	
		4-26-62	111.6	263.4	
		5-23-62	□		
		6-20-62	116.7	258.3	
		7-23-62	117.9	257.1	
		8-23-62	112.0	263.0	
		9-19-62	108.4	266.6	
		10-16-62	104.2	270.8	
		11-20-62	106.9	268.1	
		12-18-62	103.4	271.6	
		1-22-63	104.7	270.3	
		2-26-63	103.8	271.2	
		3-26-63	99.7	275.3	
		4-22-63	101.9	273.1	
		5-20-63	□		
		6-28-63	□		
19S/26E-23E01 M	359.0	10-10-62	115.0	244.0	6001
		2-07-63	96.5	262.5	
LINDSAY-STRATHMORE IRRIG DIST			5-22.27		
19S/27E-29D01 M	385.0	10-12-62	91.6	293.4	6001
		2-04-63	91.7	293.3	
20S/27E-06B01 M	372.0	7-24-62	64.9	307.1	6001
		8-23-62	62.8	309.2	
		9-19-62	62.7	309.3	
		10-16-62	62.1	309.9	
		11-20-62	62.5	309.5	
		12-19-62	62.2	309.8	
		1-22-63	64.4	307.6	
		2-26-63	65.9	306.1	
		3-26-63	66.7	305.3	
		4-22-63	67.4	304.6	
		5-20-63	67.5	304.5	
		6-28-63	67.8	304.2	
20S/27E-21F01 M	414.0	10-03-61	□		6001

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LINDSAY-STRATHMORE IRRIG DIST			5-22.27		
20S/27E-21F01 M CONT.	414.0	2-05-62	67.7	346.3	6001
		10-12-62	□		
		2-04-63	59.2	354.8	
20S/27E-29J01 M	406.0	2-04-63	54.6	351.4	6001
LINDMORE IRRIGATION DISTRICT			5-22.28		
20S/26E-01P01 M	360.0	9-30-61	139.6	220.4	6001
		2-05-62	116.2	243.8	
		10-08-62	109.0	251.0	
		2-05-63	109.0	251.0	
		5-20-63	110.0	250.0	
		6-28-63	99.0	261.0	
20S/26E-22C02 M	341.0	10-09-62	126.9	214.1	6001
		2-06-63	119.0	222.0	
20S/26E-24K01 M	362.5	7-25-61	113.5	249.0	6001
		8-30-61	114.2	248.3	
		9-20-61	110.3	252.2	
		10-25-61	106.8	255.7	
		11-29-61	103.4	259.1	
		12-19-61	101.8	260.7	
		1-24-62	99.9	262.6	
		3-01-62	99.5	263.0	
		3-28-62	96.8	265.7	
		4-25-62	99.5	263.0	
		5-23-62	98.2	264.3	
		6-20-62	97.9	264.6	
		7-23-62	97.5	265.0	
		8-22-62	97.9	264.6	
		9-18-62	93.8	268.7	
		10-15-62	91.9	270.6	
		11-19-62	88.6	273.9	
		12-18-62	89.3	273.2	
		1-22-63	92.5	270.0	
		2-26-63	86.2	276.3	
		3-21-63	88.5	274.0	
		4-25-63	84.8	277.7	
		5-20-63	85.8	276.7	
		6-27-63	87.1	275.4	
20S/26E-32A01 M	331.5	7-25-61	□		6001
		8-30-61	150.9	180.6	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LINDMORE IRRIGATION DISTRICT			5-22.28		
20S/26E-32A01 M CONT.	331.5	9-20-61	141.3	190.2	6001
		10-25-61	132.7	198.8	
		11-28-61	127.9	203.6	
		12-21-61	124.9	206.6	
		1-24-62	119.8	211.7	
		2-28-62	117.0	214.5	
		3-28-62	□		
		4-25-62	□		
		5-23-62	124.5	207.0	
		6-19-62	136.5	195.0	
		7-00-62	□		
		8-22-62	146.4	185.1	
		9-18-62	□		
		10-15-62	132.0	199.5	
		11-19-62	124.0	207.5	
		12-18-62	120.0	211.5	
		1-21-63	119.3	212.2	
		2-26-63	120.0	211.5	
		3-21-63	126.8	204.7	
		4-25-63	115.5	216.0	
		5-20-63	118.9	212.6	
		6-27-63	136.0	195.5	
20S/27E-29E01 M	392.0	7-26-61	□		6001
		8-30-61	81.1	310.9	
		9-20-61	81.6	310.4	
		10-25-61	80.3	311.7	
		11-29-61	73.6	318.4	
		12-19-61	72.5	319.5	
		1-24-62	72.2	319.8	
		3-01-62	70.7	321.3	
		3-28-62	67.3	324.7	
		4-25-62	□		
		5-23-62	□		
		6-20-62	□		
		7-23-62	68.7	323.3	
		8-22-62	65.2	326.8	
		9-19-62	□		
		10-15-62	63.9	328.1	
		11-19-62	62.1	329.9	
		12-18-62	60.7	331.3	
		1-22-63	65.0	327.0	
		2-26-63	63.0	329.0	
		3-21-63	59.0	333.0	
		4-25-63	57.2	334.8	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LINDMORE IRRIGATION DISTRICT			5-22.28		
20S/27E-29E01 M CONT.	392.0	5-20-63	□		6001
		6-27-63	60.4	331.6	
21S/26E-01Q01 M	372.0	7-26-61	151.2*	220.8	6001
		8-29-61	134.5	237.5	
		9-20-61	116.4	255.6	
		10-26-61	101.1	270.9	
		11-28-61	116.1*	255.9	
		12-21-61	93.0	279.0	
		1-24-62	90.5	281.5	
		2-27-62	86.4	285.6	
		3-28-62	85.0	287.0	
		4-25-62	103.1	268.9	
		5-23-62	108.5	263.5	
		6-20-62	123.0	249.0	
		7-24-62	116.4	255.6	
		8-22-62	117.2	254.8	
		9-18-62	98.8	273.2	
		10-15-62	92.4	279.6	
		11-19-62	85.6	286.4	
		12-18-62	90.5	281.5	
		1-21-63	85.2	286.8	
		2-26-63	81.3	290.7	
		4-25-63	84.8	287.2	
		5-20-63	103.9	268.1	
		6-27-63	105.5	266.5	
21S/27E-02E01 M	429.0	7-26-61	49.6	379.4	6001
		8-29-61	55.5	373.5	
		9-20-61	56.9*	372.1	
		10-26-61	54.7	374.3	
		11-28-61	□		
		12-19-61	53.0	376.0	
		1-24-62	52.9	376.1	
		3-01-62	51.5	377.5	
		3-28-62	48.7	380.3	
		4-25-62	49.8	379.2	
		5-23-62	50.0	379.0	
		6-20-62	48.7	380.3	
		7-23-62	□		
		8-22-62	43.6	385.4	
		9-18-62	42.0	387.0	
		10-15-62	41.2	387.8	
		11-19-62	41.4	387.6	
		12-18-62	42.1	386.9	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LINDMORE IRRIGATION DISTRICT			5-22.28		
21S/27E-02E01 M CONT.	429.0	1-22-63	47.1	381.9	6001
		2-26-63	43.5	385.5	
		3-21-63	40.3	388.7	
		4-25-63	40.8	388.2	
		5-20-63	42.9	386.1	
		6-27-63	43.5	385.5	
PORTERVILLE IRRIGATION DISTRICT			5-22.29		
21S/26E-23N01 M	374.0	10-09-61	79.7	294.3	6001
		2-06-62	78.7	295.3	
		4-25-62	69.9	304.1	
		6-07-62	74.1	299.9	
		8-16-62	80.3	293.7	
		10-08-62	63.9	310.1	
		1-22-63	66.9	307.1	
		2-06-63	68.1	305.9	
		3-22-63	66.1	307.9	
		4-26-63	67.1	306.9	
		5-27-63	67.7	306.3	
		6-18-63	66.7	307.3	
21S/27E-21E01 M	409.0	7-27-61	49.8	359.2	6001
		8-29-61	53.3	355.7	
		9-20-61	DRY		
		10-26-61	53.4	355.6	
		11-28-61	52.4	356.6	
		12-19-61	51.9	357.1	
		1-24-62	51.5	357.5	
		2-27-62	50.9	358.1	
		3-28-62	49.9	359.1	
		4-24-62	50.0	359.0	
		5-23-62	50.4	358.6	
		6-20-62	52.1	356.9	
		7-23-62	DRY		
		8-22-62	DRY		
		9-18-62	DRY		
		10-15-62	53.7	355.3	
		11-19-62	50.3	358.7	
		12-18-62	50.2	358.8	
		1-21-63	49.3	359.7	
		2-26-63	47.6	361.4	
		3-21-63	48.0	361.0	
		4-25-63	46.3	362.7	
		5-20-63	45.4	363.6	
PORTERVILLE IRRIGATION DISTRICT			5-22.29		
21S/27E-21E01 M CONT.	409.0	6-27-63	46.1	362.9	6001
21S/27E-23N01 M	436.0	10-12-62	□		6001
		2-01-63	60.5	375.5	
21S/27E-28E01 M	420.0	1-24-63	39.4	380.6	6001
		3-22-63	40.0	380.0	
		5-27-63	39.1	380.9	
		6-24-63	□		
21S/27E-29H01 M	414.0	7-26-61	□		6001
		8-29-61	□		
		9-20-61	□		
		10-26-61	45.0	369.0	
		11-28-61	46.0	368.0	
		12-19-61	43.9	370.1	
		1-24-62	□		
		2-27-62	42.9	371.1	
		3-28-62	□		
		4-24-62	□		
		5-23-62	39.9	374.1	
		6-20-62	41.0	373.0	
		7-23-62	□		
		8-22-62	□		
		9-18-62	□		
		10-15-62	39.0	375.0	
		11-19-62	37.9	376.1	
		12-18-62	36.7	377.3	
		1-24-63	#		
22S/26E-01J01 M	395.0	10-09-61	89.5	305.5	6001
		12-04-61	87.4	307.6	
		2-06-62	85.0	310.0	
		4-25-62	86.1	308.9	
		6-11-62	88.8	306.2	
		8-17-62	117.2	277.8	
		10-08-62	93.9	301.1	
		1-22-63	□		
		2-08-63	85.8	309.2	
		3-22-63	84.4	310.6	
		4-26-63	85.1	309.9	
		5-27-63	88.1	306.9	
		6-17-63	89.7	305.3	
22S/27E-10R01 M	467.0	7-23-62	126.5	340.5	6001

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STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
PORTERVILLE IRRIGATION DISTRICT			5-22.29		
22S/27E-10R01 M CONT.	467.0	8-22-62	122.0	345.0	6001
		9-18-62	123.0	344.0	
		10-15-62	¤		
		11-20-62	120.2	346.8	
		12-18-62	118.5	348.5	
		1-22-63	80.5	386.5	
		2-07-63	148.0*	319.0	
		3-22-63	80.2	386.8	
		4-26-63	78.9	388.1	
		5-27-63	82.9	384.1	
		6-19-63	115.8	351.2	
LOWER TULE RIVER IRRIGATION DIST			5-22.30		
21S/23E-22J01 M	221.5	10-09-62	119.3	102.2	6001
		2-21-63	113.6	107.9	
21S/24E-15H01 M	253.0	10-09-62	73.9	179.1	6001
		2-05-63	71.0	182.0	
21S/24E-31D01 M	230.0	7-26-61	87.6	142.4	6001
		8-30-61	88.4	141.6	
		9-18-61	88.9	141.1	
		10-24-61	89.7	140.3	
		11-28-61	90.0	140.0	
		12-20-61	90.7	139.3	
		1-24-62	90.9	139.1	
		2-28-62	90.1	139.9	
		3-27-62	90.6	139.4	
		4-23-62	90.8	139.2	
		5-22-62	90.5	139.5	
		6-19-62	90.3	139.7	
		7-23-62	89.8	140.2	
		8-22-62	89.2	140.8	
		9-18-62	89.0	141.0	
		10-15-62	89.0	141.0	
		11-19-62	88.5	141.5	
		12-17-62	88.5	141.5	
		1-14-63	88.7	141.3	
		2-05-63	89.5	140.5	
		4-03-63	86.5	143.5	
		5-01-63	87.5	142.5	
		6-03-63	85.5	144.5	
21S/24E-35M01 M	251.0	7-26-61	95.4	155.6	6001

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LOWER TULE RIVER IRRIGATION DIST			5-22.30		
21S/24E-35M01 M CONT.	251.0	8-30-61	98.9	152.1	6001
		9-18-61	99.8	151.2	
		10-25-61	101.7	149.3	
		11-28-61	100.7	150.3	
		12-20-61	100.0	151.0	
		1-24-62	99.1	151.9	
		2-28-62	93.0	158.0	
		3-27-62	93.1	157.9	
		4-23-62	95.1	155.9	
		5-22-62	99.9	151.1	
		6-19-62	101.0	150.0	
		7-23-62	98.0	153.0	
		8-22-62	96.8	154.2	
		9-18-62	95.2	155.8	
		10-15-62	95.6	155.4	
		11-19-62	96.0	155.0	
		12-17-62	95.4	155.6	
		1-14-63	95.6	155.4	
		2-06-63	93.0	158.0	
		4-03-63	96.0	155.0	
		5-01-63	97.0	154.0	
		6-03-63	96.0	155.0	
21S/25E-08H01 M	285.0	10-10-62	¤		6001
		2-06-63	84.5	200.5	
21S/25E-16A01 M	291.0	10-02-61	74.0	217.0	6001
		2-20-62	66.0	225.0	
		10-10-62	67.0	224.0	
		1-14-63	61.5	229.5	
		2-06-63	62.0	229.0	
		6-05-63	27.0	264.0	
21S/26E-06G02 M	322.0	7-26-61	156.8*	165.2	6001
		8-30-61	158.0*	164.0	
		9-20-61	143.1*	178.9	
		10-26-61	112.5	209.5	
		11-28-61	105.5	216.5	
		12-21-61	99.0	223.0	
		1-25-62	96.6	225.4	
		2-28-62	94.6	227.4	
		3-28-62	108.5	213.5	
		4-25-62	129.4	192.6	
		5-22-62	122.1	199.9	
		6-19-62	140.7	181.3	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LOWER TULE RIVER IRRIGATION DIST			5-22.30		
21S/26E-06G02 M CONT.	322.0	7-24-62	136.8	185.2	6001
		8-22-62	131.9	190.1	
		9-18-62	125.7	196.3	
		10-15-62	102.8	219.2	
		11-19-62	94.3	227.7	
		12-18-62	91.2	230.8	
		1-14-63	92.5	229.5	
		2-06-63	92.5	229.5	
		4-03-63	99.5	222.5	
		5-02-63	100.5	221.5	
		6-05-63	103.5	218.5	
21S/26E-10H01 M	359.0	7-24-62	◻		6001
		8-22-62	100.0	259.0	
		9-18-62	93.0	266.0	
		10-15-62	86.9	272.1	
		11-19-62	86.2	272.8	
		12-18-62	85.3	273.7	
		1-14-63	◻		
		2-06-63	90.0	269.0	
		3-03-63	65.0	294.0	
		5-01-63	◻		
		6-05-63	◻		
22S/24E-09A01 M	244.0	9-28-61	122.0	122.0	6001
		2-15-62	118.0	126.0	
		10-10-62	127.0	117.0	
		1-15-63	129.3	114.7	
		2-07-63	126.0	118.0	
		6-05-63	126.0	118.0	
22S/24E-15A01 M	251.5	7-19-62	◻		6001
		8-16-62	157.0	94.5	
		9-13-62	155.0	96.5	
		10-10-62	156.0	95.5	
		11-21-62	163.0	88.5	
		12-12-62	◻		
		1-15-63	◻		
		2-06-63	◻		
		3-06-63	151.0	100.5	
		4-03-63	141.0	110.5	
		5-01-63	◻		
		6-03-63	153.0*	98.5	
22S/25E-10E01 M	294.0	7-22-61	◻		6001

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LOWER TULE RIVER IRRIGATION DIST			5-22.30		
22S/25E-10E01 M CONT.	294.0	8-08-61	121.5	172.5	6001
		9-15-61	130.3	163.7	
		9-28-61	118.5	175.5	
		11-14-61	119.5	174.5	
		12-18-61	114.5	179.5	
		1-23-62	114.5	179.5	
		2-15-62	119.5	174.5	
		3-27-62	114.5	179.5	
		4-17-62	125.5	168.5	
		5-11-62	114.5	179.5	
		6-19-62	120.5	173.5	
		7-19-62	123.5	170.5	
		8-16-62	123.0	171.0	
		9-13-62	126.5	167.5	
		10-11-62	121.5	172.5	
		11-21-62	115.5	178.5	
		1-15-63	117.9	176.1	
		2-07-63	117.5	176.5	
		3-06-63	117.5	176.5	
		4-03-63	118.5	175.5	
		5-02-63	120.5	173.5	
		6-05-63	119.5	174.5	
22S/25E-15A01 M	300.5	7-19-62	145.5	155.0	6001
		8-16-62	139.5	161.0	
		9-13-62	139.5	161.0	
		10-11-62	126.5	174.0	
		11-21-62	132.5	168.0	
		12-12-62	127.5	173.0	
		1-15-63	134.5	166.0	
		2-07-63	120.5	180.0	
		3-06-63	127.5	173.0	
		4-03-63	151.5	149.0	
		5-02-63	130.5	170.0	
		6-03-63	139.5	161.0	
22S/26E-06A01 M	337.0	10-08-62	120.0	217.0	6001
		2-05-63	113.7	223.3	
22S/26E-06F04 M	331.0	7-27-61	157.6	173.4	6001
		8-30-61	157.9	173.1	
		9-20-61	149.7	181.3	
		10-26-61	140.2	190.8	
		11-30-61	130.1	200.9	
		12-19-61	127.4	203.6	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LOWER TULE RIVER IRRIGATION DIST			5-22.30		
22S/26E-06F04 M CONT.	331.0	1-25-62	125.1	205.9	6001
		2-27-62	123.8	207.2	
		3-28-62	128.2	202.8	
		4-24-62	126.9	204.1	
		5-22-62	127.4	203.6	
		6-20-62	134.3	196.7	
		7-23-62	137.8	193.2	
		8-22-62	140.4	190.6	
		9-18-62	136.9	194.1	
		10-15-62	129.3	201.7	
		11-20-62	123.9	207.1	
		12-18-62	122.3	208.7	
		1-15-63	120.5	210.5	
		2-07-63	120.5	210.5	
		4-03-63	123.5	207.5	
		5-01-63	121.5	209.5	
		6-03-63	119.5	211.5	
VANDALIA IRRIGATION DISTRICT			5-22.31		
22S/28E-07Q01 M	524.0	7-27-61	152.0	372.0	6001
		9-01-61	¤		
		9-20-61	135.6	388.4	
		10-26-61	136.0	388.0	
		11-30-61	134.8	389.2	
		12-20-61	132.8	391.2	
		1-25-62	129.7	394.3	
		2-27-62	127.3	396.7	
		3-28-62	125.1	398.9	
		4-24-62	¤		
		5-22-62	127.5	396.5	
		6-20-62	131.0	393.0	
		7-23-62	139.5	384.5	
		8-22-62	136.0	388.0	
		9-18-62	136.1	387.9	
		10-15-62	137.2	386.8	
		11-20-62	133.0	391.0	
		12-18-62	131.5	392.5	
		1-23-63	129.7	394.3	
		2-26-63	126.9	397.1	
		3-21-63	125.0	399.0	
		4-25-63	122.9	401.1	
		5-20-63	122.0	402.0	
		6-27-63	133.9	390.1	
22S/28E-18A01 M	535.0	7-23-62	135.1	399.9	6001
VANDALIA IRRIGATION DISTRICT			5-22.31		
22S/28E-18A01 M CONT.	535.0	8-22-62	152.9	382.1	6001
		9-18-62	150.8	384.2	
		10-15-62	125.2	409.8	
		11-20-62	126.8	408.2	
		12-18-62	115.5	419.5	
		1-23-63	119.2	415.8	
		2-26-63	109.1	425.9	
		3-21-63	108.0	427.0	
		4-25-63	104.0	431.0	
		5-20-63	103.3	431.7	
		6-27-63	124.0	411.0	
SAUCELITO IRRIGATION DISTRICT			5-22.32		
22S/26E-12R02 M	396.0	10-04-61	123.3	272.7	6001
		2-08-62	114.5	281.5	
		8-17-62	122.0	274.0	
		10-08-62	117.6	278.4	
		10-12-62	118.0	278.0	
		2-04-63	113.9	282.1	
		4-26-63	113.4	282.6	
		6-18-63	118.8	277.2	
22S/26E-15J01 M	371.0	7-23-62	154.4	216.6	6001
		8-22-62	147.3	223.7	
		9-18-62	145.1	225.9	
		10-15-62	146.4	224.6	
		11-20-62	136.0	235.0	
		12-18-62	133.6	237.4	
		1-23-63	135.0	236.0	
		2-26-63	134.7	236.3	
		3-21-63	139.5	231.5	
		4-25-63	135.9	235.1	
		5-20-63	143.0	228.0	
		6-27-63	142.2	228.8	
22S/26E-32E01 M	339.0	7-27-61	¤		6001
		8-30-61	¤		
		9-20-61	162.9	176.1	
		10-26-61	158.6	180.4	
		11-29-61	159.1	179.9	
		12-20-61	158.3	180.7	
		1-25-62	149.5	189.5	
		2-27-62	146.9	192.1	
		3-28-62	153.2	185.8	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAUCELITO IRRIGATION DISTRICT			5-22.32		
22S/26E-32E01 M	339.0	4-24-62	145.6	193.4	6001
CONT.		5-21-62	144.3	194.7	
		6-20-62	148.2	190.8	
		7-23-62	¤		
		8-22-62	¤		
		9-18-62	¤		
		10-15-62	153.8	185.2	
		11-19-62	145.3	193.7	
		12-18-62	142.7	196.3	
		1-23-63	142.6	196.4	
		2-26-63	146.2	192.8	
		3-21-63	149.8	189.2	
		4-25-63	139.3	199.7	
		5-20-63	137.8	201.2	
		6-27-63	¤		
23S/26E-02R01 M	397.0	10-11-62	164.0	233.0	6001
		2-07-63	168.0	229.0	
23S/26E-03R01 M	381.0	9-19-61	199.6	181.4	6001
		10-26-61	193.4	187.6	
		11-29-61	196.7	184.3	
		12-19-61	187.1	193.9	
		1-25-62	183.8	197.2	
		2-26-62	181.2	199.8	
		3-28-62	183.3	197.7	
		4-24-62	191.1	189.9	
		5-21-62	187.9	193.1	
		6-20-62	¤		
		7-24-62	206.3	174.7	
		8-22-62	199.7	181.3	
		9-18-62	194.0	187.0	
		10-15-62	192.5	188.5	
		11-19-62	180.9	200.1	
		12-17-62	179.7	201.3	
		1-23-63	¤		
		2-26-63	¤		
		3-21-63	¤		
		4-25-63	190.6	190.4	
		5-20-63	195.4	185.6	
		6-27-63	181.7	199.3	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
PIXLEY IRRIGATION DISTRICT			5-22.33		
22S/25E-25N01 M	310.0	7-26-61	220.3	89.7	6001
		8-30-61	221.4	88.6	
		9-20-61	211.9	98.1	
		10-26-61	205.6	104.4	
		11-29-61	199.6	110.4	
		12-20-61	195.7	114.3	
		1-25-62	191.0	119.0	
		2-27-62	188.1	121.9	
		3-28-62	189.7	120.3	
		4-24-62	195.3	114.7	
		5-21-62	195.3	114.7	
		6-20-62	202.1	107.9	
		7-24-62	209.5	100.5	
		8-22-62	209.5	100.5	
		9-18-62	205.6	104.4	
		10-15-62	198.2	111.8	
		11-19-62	192.8	117.2	
		12-17-62	189.2	120.8	
		1-23-63	188.1	121.9	
		2-26-63	185.3	124.7	
		3-21-63	195.5	114.5	
		4-25-63	187.8	122.2	
		5-20-63	193.1	116.9	
		6-27-63	199.7	110.3	
23S/23E-02B01 M	207.0	10-10-62	¤		6001
		2-04-63	33.1	173.9	
23S/24E-16R01 M	220.0	7-26-61	126.3	93.7	6001
		8-30-61	129.9	90.1	
		9-18-61	130.4	89.6	
		10-25-61	128.9	91.1	
		11-29-61	126.0	94.0	
		12-18-61	123.1	96.9	
		1-24-62	119.0	101.0	
		2-21-62	117.0	103.0	
		3-28-62	115.8	104.2	
		4-23-62	118.7	101.3	
		5-21-62	119.6	100.4	
		6-21-62	120.9	99.1	
		7-24-62	125.3	94.7	
		8-23-62	127.0	93.0	
		9-19-62	128.0	92.0	
		10-16-62	127.6	92.4	
		11-19-62	127.5	92.5	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
PIXLEY IRRIGATION DISTRICT			5-22.33		
23S/24E-16R01 M CONT.	220.0	12-17-62	122.7	97.3	6001
		1-24-63	120.3	99.7	
		2-26-63	120.2	99.8	
		3-22-63	120.8	99.2	
		4-26-63	122.3	97.7	
		5-21-63	122.5	97.5	
		6-28-63	123.1	96.9	
23S/25E-09Q02 M	278.0	7-26-61	250.5	27.5	6001
		8-30-61	243.6	34.4	
		9-19-61	217.4	60.6	
		10-25-61	190.6	87.4	
		11-29-61	178.6	99.4	
		12-19-61	170.4	107.6	
		1-25-62	160.7	117.3	
		2-26-62	156.0	122.0	
		3-28-62	191.5	86.5	
		4-24-62	183.7	94.3	
		5-21-62	175.6	102.4	
		6-20-62	DRY		
		7-23-62	DRY		
		8-22-62	DRY		
		9-18-62	DRY		
		10-15-62	180.6	97.4	
		11-19-62	166.5	111.5	
		12-17-62	160.7	117.3	
		1-23-63	162.6	115.4	
		2-26-63	153.4	124.6	
		3-22-63	193.5	84.5	
		4-25-63	168.8	109.2	
		5-20-63	173.9	104.1	
		6-27-63	196.0	82.0	
23S/25E-14C01 M	300.0	7-23-62	87.9	212.1	6001
		8-22-62	87.0	213.0	
		9-18-62	86.0	214.0	
		10-15-62	83.0	217.0	
		11-19-62	82.6	217.4	
		12-17-62	78.8	221.2	
		1-23-63	79.8	220.2	
		2-26-63	¤		
		3-20-63	#		
23S/25E-15A01 M	290.0	7-26-61	80.2	209.8	6001
		8-30-61	78.9	211.1	
PIXLEY IRRIGATION DISTRICT			5-22.33		
23S/25E-15A01 M CONT.	290.0	9-19-61	78.5	211.5	6001
		10-25-61	79.3	210.7	
		11-29-61	80.0	210.0	
		12-19-61	81.3	208.7	
		1-25-62	82.7	207.3	
		2-26-62	83.8	206.2	
		3-28-62	84.0	206.0	
		4-24-62	84.6	205.4	
		5-21-62	84.0	206.0	
		6-20-62	84.6	205.4	
		7-24-62	84.6	205.4	
		8-22-62	84.2	205.8	
		9-18-62	83.8	206.2	
		10-15-62	83.0	207.0	
		11-19-62	82.4	207.6	
		12-17-62	81.9	208.1	
		1-23-63	81.7	208.3	
		2-26-63	81.2	208.8	
		3-22-63	#		
23S/25E-15J02 M	291.0	7-26-61	¤		6001
		8-30-61	236.4	54.6	
		9-19-61	213.9	77.1	
		10-25-61	199.2	91.8	
		11-29-61	186.8	104.2	
		12-19-61	182.4	108.6	
		1-25-62	173.0	118.0	
		2-26-62	165.4	125.6	
		3-28-62	181.1	109.9	
		4-24-62	190.7	100.3	
		5-21-62	183.5	107.5	
		6-20-62	197.9	93.1	
		7-24-62	219.9	71.1	
		8-22-62	223.0	68.0	
		9-18-62	196.9	94.1	
		10-15-62	196.7	94.3	
		11-19-62	176.0	115.0	
		12-17-62	167.5	123.5	
		1-23-63	165.1	125.9	
		2-26-63	163.9	127.1	
		3-21-63	184.2	106.8	
		4-25-63	170.4	120.6	
		5-20-63	179.9	111.1	
		6-27-63	198.2	92.8	
23S/25E-16N03 M	263.0	7-18-62	194.7	68.3	5000

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
PIXLEY IRRIGATION DISTRICT			5-22.33		
23S/25E-16N03 M CONT.	263.0	8-17-62	199.8	63.2	5000
		9-11-62	196.0	67.0	
		10-09-62	173.0	90.0	
		11-08-62	160.6	102.4	
		12-04-62	152.7	110.3	
		1-05-63	151.5	111.5	
		2-27-63	142.3	120.7	
		3-27-63	180.0	83.0	
		4-24-63	159.0	104.0	
		5-22-63	159.0	104.0	
		6-19-63	162.4	100.6	
23S/25E-16N04 M	263.0	7-18-62	115.3	147.7	5000
		8-17-62	114.5	148.5	
		9-11-62	113.5	149.5	
		10-09-62	109.9	153.1	
		11-08-62	107.6	155.4	
		12-04-62	106.2	156.8	
		1-05-63	105.5	157.5	
		2-27-63	104.1	158.9	
		3-27-63	105.3	157.7	
		4-24-63	104.4	158.6	
		5-22-63	104.4	158.6	
		6-19-63	104.1	158.9	
23S/25E-17Q03 M	269.0	7-18-62	116.3	152.7	5000
		8-17-62	116.8	152.2	
		9-11-62	115.8	153.2	
		10-09-62	112.6	156.4	
		11-08-62	111.5	157.5	
		12-04-62	110.1	158.9	
		1-05-63	109.2	159.8	
		2-27-63	106.9	162.1	
		3-27-63	107.4	161.6	
		4-24-63	108.1	160.9	
		5-22-63	108.1	160.9	
		6-19-63	107.7	161.3	
23S/26E-08R01 M	345.0	7-26-61	219.1	125.9	6001
		8-30-61	219.7	125.3	
		9-19-61	212.5	132.5	
		10-26-61	210.0	135.0	
		11-29-61	204.4	140.6	
		12-19-61	203.3	141.7	
		1-25-62	199.9	145.1	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
PIXLEY IRRIGATION DISTRICT			5-22.33		
23S/26E-08R01 M CONT.	345.0	2-26-62	197.3	147.7	6001
		3-28-62	203.6	141.4	
		4-24-62	203.4	141.6	
		5-21-62	200.2	144.8	
		6-20-62	208.7	136.3	
		7-23-62	211.4	133.6	
		8-22-62	206.8	138.2	
		9-18-62	202.7	142.3	
		10-15-62	198.4	146.6	
		11-19-62	193.9	151.1	
		12-17-62	191.2	153.8	
		1-23-63	189.9	155.1	
		2-26-63	190.5	154.5	
		3-21-63	194.3	150.7	
		4-25-63	189.3	155.7	
		5-20-63	189.2	155.8	
		6-27-63	193.5	151.5	
ALPAUGH-ALLENSWORTH AREA			5-22.34		
22S/23E-28L01 M	195.0	7-27-61	◻		6001
		8-29-61	162.9	32.1	
		9-18-61	◻		
		10-25-61	109.5*	85.5	
		11-29-61	90.6	104.4	
		12-18-61	82.2	112.8	
		1-24-62	82.1	112.9	
		2-26-62	76.2	118.8	
		3-29-62	79.9	115.1	
		4-23-62	97.0	98.0	
		5-21-62	82.7	112.3	
		6-20-62	◻		
		7-24-62	125.0	70.0	
		8-23-62	133.8	61.2	
		9-19-62	107.8	87.2	
		10-16-62	101.2	93.8	
		11-19-62	80.5	114.5	
		12-17-62	76.8	118.2	
		1-24-63	76.1	118.9	
		2-26-63	74.1	120.9	
		3-22-63	95.0	100.0	
		4-25-63	◻		
		5-21-63	72.6	122.4	
		6-27-63	80.3	114.7	
23S/23E-33A01 M	210.0	7-26-61	14.0	196.0	6001

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
ALPAUGH-ALLENSWORTH AREA			5-22.34		
23S/23E-33A01 M	210.0	8-29-61	14.0	196.0	6001
CONT.		9-18-61	14.2	195.8	
		10-25-61	14.0	196.0	
		11-29-61	13.7	196.3	
		12-18-61	14.0	196.0	
		1-24-62	14.3	195.7	
		2-26-62	13.6	196.4	
		3-29-62	13.5	196.5	
		4-23-62	13.5	196.5	
		5-21-62	13.7	196.3	
		6-21-62	13.7	196.3	
		7-24-62	13.5	196.5	
		8-23-62	13.8	196.2	
		9-19-62	13.8	196.2	
		10-16-62	13.9	196.1	
		11-19-62	14.0	196.0	
		12-17-62	14.2	195.8	
		1-24-63	14.3	195.7	
		2-26-63	14.2	195.8	
		3-22-63	13.8	196.2	
		4-26-63	13.7	196.3	
		5-21-63	13.8	196.2	
		6-28-63	13.8	196.2	
23S/23E-33A04 M	210.0	7-26-61	141.3	68.7	6001
		8-29-61	147.7	62.3	
		9-18-61	149.6	60.4	
		10-25-61	148.9	61.1	
		11-29-61	143.7	66.3	
		12-18-61	139.7	70.3	
		1-24-62	129.9	80.1	
		2-26-62	128.9	81.1	
		3-29-62	126.4	83.6	
		4-23-62	136.6	73.4	
		5-21-62	92.5	117.5	
		6-21-62	84.8	125.2	
		7-24-62	73.6	136.4	
		8-23-62	73.9	136.1	
		9-19-62	74.8	135.2	
		10-16-62	75.5	134.5	
		11-19-62	75.7	134.3	
		12-17-62	75.0	135.0	
		1-24-63	74.7	135.3	
		2-26-63	73.8	136.2	
		3-22-63	72.9	137.1	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
ALPAUGH-ALLENSWORTH AREA			5-22.34		
23S/23E-33A04 M	210.0	4-26-63	73.6	136.4	6001
CONT.		5-21-63	73.8	136.2	
		6-28-63	73.4	136.6	
23S/23E-33A05 M	210.0	7-26-61	121.5	88.5	6001
		8-29-61	124.0	86.0	
		9-18-61	125.5	84.5	
		10-25-61	127.1	82.9	
		11-29-61	127.5	82.5	
		12-18-61	126.9	83.1	
		1-24-62	125.3	84.7	
		2-26-62	123.3	86.7	
		3-29-62	121.7	88.3	
		4-23-62	120.5	89.5	
		5-21-62	118.7	91.3	
		6-21-62	119.1	90.9	
		7-24-62	121.0	89.0	
		8-23-62	124.3	85.7	
		9-19-62	126.3	83.7	
		10-16-62	127.6	82.4	
		11-19-62	127.3	82.7	
		12-17-62	127.5	82.5	
		1-24-63	125.8	84.2	
		2-26-63	123.3	86.7	
		3-22-63	123.5	86.5	
		4-26-63	122.9	87.1	
		5-21-63	123.0	87.0	
		6-28-63	122.1	87.9	
24S/23E-21B02 M	204.0	10-09-62	46.7	157.3	6001
		2-04-63	43.9	160.1	
24S/23E-22E01 M	205.0	7-26-61	75.1	129.9	6001
		8-29-61	78.0	127.0	
		9-18-61	78.5	126.5	
		10-25-61	79.4	125.6	
		11-29-61	75.3*	129.7	
		12-18-61	75.7*	129.3	
		1-24-62	68.5	136.5	
		2-26-62	66.4	138.6	
		3-29-62	60.3	144.7	
		4-23-62	65.0	140.0	
		5-21-62	63.7	141.3	
		6-21-62	66.8	138.2	
		7-24-62	64.4	140.6	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
ALPAUGH-ALLENSWORTH AREA			5-22.34		
24S/23E-22E01 M CONT.	205.0	8-23-62	64.1	140.9	6001
		9-19-62	66.5	138.5	
		10-15-62	69.5	135.5	
		11-19-62	67.8	137.2	
		12-17-62	65.8	139.2	
		1-24-63	67.3	137.7	
		2-26-63	70.2	134.8	
		3-22-63	72.7	132.3	
		4-26-63	69.4	135.6	
		5-21-63	69.8	135.2	
		6-28-63	74.9	130.1	
24S/23E-34R01 M	206.0	2-05-62	149.7	56.3	6001
		10-09-62	176.2	29.8	
		2-04-63	152.5	53.5	
24S/24E-20R01 M	218.0	7-26-61	197.2	20.8	6001
		8-29-61	197.5	20.5	
		9-19-61	201.0	17.0	
		10-25-61	□		
		11-29-61	169.6	48.4	
		12-18-61	152.6	65.4	
		1-24-62	135.6	82.4	
		2-26-62	124.7	93.3	
		3-29-62	□		
		4-23-62	150.4	67.6	
		5-21-62	148.8	69.2	
		6-21-62	166.8	51.2	
		7-24-62	□		
		8-23-62	□		
		9-19-62	□		
		10-16-62	193.0	25.0	
		11-19-62	168.9	49.1	
		12-17-62	158.4	59.6	
		1-25-63	□		
		2-26-63	133.2	84.8	
		3-22-63	□		
		4-25-63	161.8	56.2	
		5-21-63	159.3	58.7	
		6-27-63	178.8	39.2	
24S/24E-23Q01 M	235.0	10-09-62	69.9	165.1	6001
		2-04-63	47.1	187.9	
24S/24E-25F01 M	249.0	7-00-61	□		6001

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
ALPAUGH-ALLENSWORTH AREA			5-22.34		
24S/24E-25F01 M CONT.	249.0	8-29-61	□		6001
		9-19-61	□		
		10-24-61	□		
		11-29-61	110.0	139.0	
		12-18-61	98.6	150.4	
		1-24-62	95.2	153.8	
		2-26-62	90.4	158.6	
		3-29-62	□		
		4-23-62	□		
		5-21-62	□		
		6-21-62	□		
		7-24-62	□		
		8-23-62	□		
		9-19-62	□		
		10-16-62	108.6	140.4	
		11-19-62	□		
		12-17-62	□		
		1-24-63	99.6	149.4	
		2-26-63	95.3	153.7	
		3-22-63	□		
		4-26-63	□		
		5-21-63	□		
		6-28-63	□		
24S/24E-32K04 M	226.0	10-10-61	115.8	110.2	6001
		2-02-62	92.4	133.6	
		10-10-62	134.1	91.9	
		2-04-63	115.5	110.5	
		5-21-63	106.7	119.3	
		6-28-63	121.4	104.6	
DELANO-EARLIMART IRRIG DIST			5-22.35		
23S/25E-27J02 M	296.0	10-09-62	108.0	188.0	6001
		2-07-63	104.0	192.0	
23S/26E-29P01 M	356.5	10-09-62	206.5	150.0	6001
		2-08-63	197.5	159.0	
23S/27E-28J01 M	533.3	10-10-62	413.0	120.3	6001
		1-31-63	351.7	181.6	
24S/25E-02H01 M	320.0	7-26-61	107.5	212.5	6001
		8-30-61	106.6	213.4	
		9-19-61	105.9	214.1	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
DELANO-EARLIMART IRRIG DIST			5-22.35		
24S/25E-02H01 M CONT.	320.0	10-25-61	104.8	215.2	6001
		11-30-61	103.2	216.8	
		12-19-61	102.3	217.7	
		1-24-62	106.1	213.9	
		2-26-62	105.5	214.5	
		3-28-62	105.9	214.1	
		4-24-62	105.6	214.4	
		5-21-62	106.6	213.4	
		6-21-62	106.6	213.4	
		7-24-62	106.2	213.8	
		8-23-62	105.1	214.9	
		9-18-62	103.6	216.4	
		10-16-62	103.6	216.4	
		11-19-62	103.5	216.5	
		12-17-62	101.4	218.6	
		1-23-63	103.7	216.3	
		2-26-63	103.8	216.2	
		4-25-63	104.9	215.1	
		5-20-63	105.1	214.9	
		6-27-63	105.3	214.7	
24S/25E-10A01 M	304.0	10-08-62	¤		6001
		2-07-63	130.5	173.5	
24S/25E-33J01 M	291.5	10-09-62	83.7	207.8	6001
		1-31-63	79.5	212.0	
24S/26E-05R01 M	376.0	10-09-62	200.0	176.0	6001
		2-08-63	203.0	173.0	
24S/26E-20H01 M	378.0	10-11-62	209.0	169.0	6001
		2-08-63	219.0	159.0	
24S/26E-29R02 M	400.0	7-20-62	165.6	234.4	5000
		8-08-62	165.4	234.6	
		9-20-62	160.1	239.9	
		10-11-62	177.0	223.0	6001
		10-14-62	157.8	242.2	5000
		11-25-62	156.9	243.1	
		12-15-62	159.6	240.4	
		1-26-63	160.4	239.6	
		2-11-63	161.0	239.0	6001
		2-22-63	162.3	237.7	5000
		3-19-63	163.2	236.8	
		4-28-63	162.8	237.2	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
DELANO-EARLIMART IRRIG DIST			5-22.35		
24S/26E-29R02 M CONT.	400.0	5-23-63	164.5	235.5	5000
		6-19-63	157.7	242.3	
24S/26E-32G01 M	396.0	10-11-62	153.5	242.5	6001
		2-11-63	152.5	243.5	
24S/26E-34F01 M	445.0	7-17-62	278.2	166.8	5000
		8-17-62	279.6	165.4	
		9-11-62	279.8	165.2	
		10-09-62	270.0	175.0	
		11-08-62	262.6	182.4	
		12-04-62	263.4	181.6	
		1-05-63	264.1	180.9	
		2-28-63	266.5	178.5	
		3-27-63	282.3	162.7	
		4-24-63	271.6	173.4	
		5-22-63	271.6	173.4	
		6-19-63	270.6*	174.4	
24S/27E-31P01 M	526.5	10-08-62	410.0	116.5	6001
		2-01-63	392.3	134.2	
25S/26E-01A02 M	505.5	7-17-62	421.7	83.8	5000
		8-17-62	434.5	71.0	
		9-11-62	421.9	83.6	
		10-09-62	375.5	130.0	
		11-08-62	360.8	144.7	
		12-05-62	359.7	145.8	
		1-05-63	364.7	140.8	
		2-28-63	348.0	157.5	
		3-27-63	453.0*	52.5	
		4-24-63	381.0	124.5	
		5-22-63	381.0	124.5	
		6-19-63	369.9*	135.6	
25S/26E-10B03 M	430.0	10-11-62	247.5	182.5	6001
		2-11-63	241.5	188.5	
25S/26E-16P01 M	388.0	7-21-61	111.8	276.2	5000
		8-17-61	113.0	275.0	
		9-21-61	112.5	275.5	
		10-20-61	112.3	275.7	
		11-16-61	112.6	275.4	
		12-22-61	113.1	274.9	
		1-18-62	114.3	273.7	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
DELANO-EARLIMART IRRIG DIST			5-22.35		
25S/26E-16P01 M CONT.	388.0	2-22-62	115.3	272.7	5000
		3-15-62	116.1	271.9	
		4-13-62	117.1	270.9	
		5-18-62	116.5	271.5	
		6-21-62	116.8	271.2	
		7-20-62	116.0	272.0	
		8-08-62	114.8	273.2	
		9-20-62	113.6	274.4	
		10-14-62	113.2	274.8	
		11-25-62	113.6	274.4	
		12-15-62	113.1	274.9	
		1-25-63	115.0	273.0	
		2-22-63	116.2	271.8	
		3-19-63	116.6	271.4	
		4-28-63	119.5	268.5	
		5-23-63	122.0	266.0	
		6-19-63	118.6	269.4	
25S/27E-22H01 M	750.0	10-05-62	377.8	372.2	6001
		1-31-63	386.0	364.0	
SOUTHERN SAN JOAQUIN MUD			5-22.36		
25S/24E-12A02 M	253.0	7-21-61	120.2	132.8	5000
		8-23-61	117.5	135.5	
		9-21-61	□		
		10-19-61	105.3	147.7	
		11-16-61	99.3	153.7	
		12-21-61	92.5	160.5	
		1-18-62	89.2	163.8	
		2-22-62	86.2	166.8	
		3-15-62	85.3	167.7	
		4-13-62	94.4	158.6	
		5-18-62	94.8	158.2	
		6-21-62	104.2	148.8	
		7-19-62	□		
		8-08-62	111.4	141.6	
		9-20-62	108.7	144.3	
		10-14-62	99.0	154.0	
		11-25-62	95.1	157.9	
		12-15-62	88.9	164.1	
		1-26-63	93.0	160.0	
		2-22-63	□		
		3-18-63	□		
		4-28-63	97.0	156.0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SOUTHERN SAN JOAQUIN MUD			5-22.36		
25S/24E-12A02 M CONT.	253.0	5-23-63	103.1	149.9	5000
		6-19-63	96.6	156.4	
25S/25E-06H01 M	259.0	10-09-62	80.2	178.8	6001
		1-29-63	□		
25S/25E-22D01 M	286.0	7-21-61	273.1	12.9	5000
		8-23-61	270.2	15.8	
		9-21-61	257.0	29.0	
		10-19-61	212.4*	73.6	
		11-16-61	189.9	96.1	
		12-21-61	164.3	121.7	
		1-18-62	152.6	133.4	
		2-22-62	137.5	148.5	
		3-15-62	134.8	151.2	
		4-13-62	150.3	135.7	
		5-18-62	149.7	136.3	
		6-21-62	171.8	114.2	
		7-19-62	184.9	101.1	
		8-08-62	198.8	87.2	
		9-20-62	204.6	81.4	
		10-14-62	185.1	100.9	
		11-25-62	159.1	126.9	
		12-15-62	148.4	137.6	
		1-26-63	141.5	144.5	
		2-22-63	134.8	151.2	
		3-18-63	133.3	152.7	
		4-28-63	163.1	122.9	
		5-23-63	168.9	117.1	
		6-19-63	155.5	130.5	
25S/25E-35P01 M	322.0	10-09-62	182.8	139.2	6001
		1-30-63	165.6	156.4	
25S/26E-28E01 M	394.0	7-21-61	207.7	186.3	5000
		8-17-61	193.8	200.2	
		9-21-61	190.2	203.8	
		10-20-61	188.7	205.3	
		11-16-61	185.9	208.1	
		12-22-61	184.3	209.7	
		1-18-62	182.2	211.8	
		2-22-62	179.9	214.1	
		3-15-62	179.0	215.0	
		4-13-62	180.3	213.7	
		5-18-62	180.6	213.4	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SOUTHERN SAN JOAQUIN MUD			5-22.36		
25S/26E-28E01 M CONT.	394.0	6-20-62	182.8	211.2	5000
		7-19-62	□		
		8-08-62	189.3	204.7	
		9-20-62	180.4	213.6	
		10-14-62	178.5	215.5	
		11-25-62	175.1	218.9	
		12-15-62	178.0	216.0	
		1-26-63	176.8	217.2	
		2-22-63	174.7	219.3	
		3-19-63	□		
		4-27-63	177.1	216.9	
		5-23-63	180.4	213.6	
		6-19-63	177.9	216.1	
25S/26E-28H02 M	414.0	10-10-62	208.3	205.7	6001
		2-01-63	210.6	203.4	
26S/25E-01C01 M	333.5	7-21-61	131.7	201.8	5000
		8-22-61	132.0	201.5	
		9-21-61	131.4	202.1	
		10-20-61	130.5	203.0	
		11-16-61	128.7	204.8	
		12-21-61	127.4	206.1	
		1-18-62	126.5	207.0	
		2-22-62	125.2	208.3	
		3-15-62	124.6	208.9	
		4-13-62	125.1	208.4	
		5-18-62	125.4	208.1	
		6-21-62	125.7	207.8	
		7-19-62	124.4	209.1	
		8-09-62	126.7	206.8	
		9-20-62	131.1	202.4	
		10-14-62	129.1	204.4	
		11-25-62	124.4	209.1	
		12-15-62	123.7	209.8	
		1-26-63	123.0	210.5	
		2-22-63	122.2	211.3	
		3-19-63	122.5	211.0	
		4-27-63	123.1	210.4	
		5-23-63	123.7	209.8	
		6-19-63	122.7	210.8	
26S/26E-10R01 M	503.0	7-20-62	□		5000
		8-08-62	□		
		10-14-62	377.4	125.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SOUTHERN SAN JOAQUIN MUD			5-22.36		
26S/26E-10R01 M CONT.	503.0	11-25-62	371.5	131.5	5000
		12-15-62	380.6	122.4	
		1-26-63	377.0	126.0	
		2-22-63	□		
		3-19-63	379.9	123.1	
		4-27-63	370.1	132.9	
		5-23-63	373.4	129.6	
		6-19-63	367.7	135.3	
26S/26E-16P01 M	443.0	10-11-62	323.3	119.7	6001
		1-30-63	307.0	136.0	
26S/26E-29C01 M	411.0	7-21-61	□		5000
		8-22-61	319.1	91.9	
		9-21-61	304.2	106.8	
		10-20-61	298.1	112.9	
		11-16-61	295.8	115.2	
		12-22-61	287.0	124.0	
		1-18-62	284.7	126.3	
		2-22-62	274.8	136.2	
		3-15-62	271.7	139.3	
		4-13-62	278.5	132.5	
		5-18-62	273.7	137.3	
		6-20-62	282.5	128.5	
		7-20-62	□		
		8-08-62	286.0	125.0	
		9-20-62	281.3	129.7	
		10-14-62	276.0	135.0	
		11-25-62	270.6	140.4	
		12-15-62	269.0	142.0	
		1-26-63	269.0	142.0	
		2-22-63	270.6	140.4	
		3-19-63	272.9	138.1	
		4-27-63	270.2	140.8	
		5-23-63	273.7	137.3	
		6-19-63	266.7	144.3	
NORTH KERN WATER STORAGE DIST			5-22.37		
26S/25E-15R01 M	352.3	7-02-62	254.6*	97.7	8700
		7-16-62	236.6*	115.7	
		8-02-62	259.6*	92.7	
		8-29-62	261.6*	90.7	
		9-11-62	237.6*	114.7	
		1-02-63	197.6*	154.7	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH KERN WATER STORAGE DIST			5-22.37		
26S/25E-15R01 M CONT.	352.3	1-15-63	230.6*	121.7	8700
		2-05-63	202.6*	149.7	
		2-15-63	197.6*	154.7	
		3-01-63	197.6*	154.7	
		3-26-63	230.6*	121.7	
		3-26-63	243.6*	108.7	
		6-17-63	202.6*	149.7	
26S/25E-31R01 M	336.6	7-05-62	254.1*	82.5	8700
		7-11-62	284.1*	52.5	
		7-16-62	283.1*	53.5	
		8-13-62	262.1*	74.5	
		8-29-62	291.1*	45.5	
		9-11-62	254.1*	82.5	
		10-15-62	216.1*	120.5	
		1-02-63	214.1*	122.5	
		1-15-63	222.1*	114.5	
		2-05-63	234.1*	102.5	
		2-15-63	199.1*	137.5	
		3-01-63	196.1*	140.5	
		6-17-63	206.1*	130.5	
26S/26E-30P01 M	392.0	7-02-62	276.0*	116.0	8700
		7-16-62	309.0*	83.0	
		8-02-62	269.0*	123.0	
		8-29-62	313.0*	79.0	
		9-11-62	269.0*	123.0	
		1-02-63	277.0*	115.0	
		1-15-63	244.0	148.0	
		2-01-63	243.0*	149.0	
		2-15-63	242.0*	150.0	
		3-01-63	234.0*	158.0	
		6-17-63	237.0*	155.0	
27S/25E-01A01 M	401.0	10-03-62	100.7	300.3	6001
		1-28-63	96.5	304.5	
27S/25E-01N01 M	394.0	7-21-61	121.4	272.6	5000
		8-23-61	124.6	269.4	
		9-20-61	124.2	269.8	
		10-19-61	125.5	268.5	
		11-16-61	125.8	268.2	
		12-21-61	127.3	266.7	
		1-18-62	128.4	265.6	
		2-22-62	130.0	264.0	
NORTH KERN WATER STORAGE DIST			5-22.37		
27S/25E-01N01 M CONT.	394.0	3-15-62	129.3	264.7	5000
		4-12-62	126.7	267.3	
		5-18-62	124.1	269.9	
		6-21-62	123.0	271.0	
		7-19-62	123.9	270.1	
		8-08-62	124.4	269.6	
		9-20-62	123.2	270.8	
		10-14-62	125.2	268.8	
		11-25-62	124.2	269.8	
		12-15-62	126.5	267.5	
		1-26-63	128.4	265.6	
		2-21-63	130.4	263.6	
		3-18-63	131.1	262.9	
		4-27-63	129.5	264.5	
		5-22-63	130.2	263.8	
		6-19-63	128.4	265.6	
27S/26E-06H02 M	416.0	10-03-62	270.0*	146.0	6001
		1-30-63	257.3	158.7	
27S/26E-20D01 M	446.8	7-21-61	□		5000
		8-22-61	□		
		9-15-61	325.5*	121.3	8700
		9-20-61	322.3	124.5	5000
		10-19-61	321.7	125.1	
		11-16-61	318.2	128.6	
		12-20-61	301.9	144.9	
		1-13-62	341.5*	105.3	8700
		1-18-62	□		5000
		2-22-62	291.5	155.3	
		2-26-62	291.5*	155.3	8700
		3-07-62	296.5*	150.3	
		3-15-62	290.1	156.7	5000
		4-12-62	□		
		5-18-62	294.5	152.3	
		6-20-62			
		6-21-62	353.5*	93.3	8700
		7-09-62	357.5*	89.3	
		7-19-62	□		5000
		7-19-62	322.5*	124.3	8700
		8-08-62	□		5000
		8-14-62	362.5*	84.3	8700
		9-04-62	328.5*	118.3	
		9-13-62	321.5*	125.3	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH KERN WATER STORAGE DIST			5-22.37		
27S/26E-20D01 M CONT.	446.8	9-20-62	□		5000
		10-14-62	303.2	143.6	
		11-25-62	□		
		12-15-62	274.8	172.0	
		1-07-63	299.5*	147.3	8700
		1-21-63	236.5*	210.3	
		1-26-63	293.8	153.0	5000
		2-08-63	301.5*	145.3	8700
		2-20-63	296.5*	150.3	
		2-21-63	□		5000
		3-07-63	298.5*	148.3	8700
		3-18-63	□		5000
		3-21-63	351.5*	95.3	8700
		4-27-63	□		5000
		5-23-63	295.6	151.2	
		6-19-63	□		
		6-21-63	349.5*	97.3	8700
27S/26E-20E01 M	435.7	7-09-62	□		8700
		7-12-62	□		
		7-19-62	304.6*	131.1	
		8-14-62	□		
		9-04-62	□		
		9-13-62	□		
		1-07-63	320.6*	115.1	
		1-21-63	321.6*	114.1	
		2-08-63	281.6*	154.1	
		2-20-63	280.6*	155.1	
		3-07-63	282.6*	153.1	
		6-21-63	331.6*	104.1	
27S/27E-30H02 M	527.0	10-04-62	418.6	108.4	6001
		1-28-63	402.4	124.6	
28S/25E-13L01 M	361.1	7-02-62	186.1*	175.0	8700
		7-16-62	204.1*	157.0	
		8-01-62	206.1*	155.0	
		8-13-62	199.1*	162.0	
		9-06-62	196.1*	165.0	
		1-02-63	192.1*	169.0	
		1-15-63	194.1*	167.0	
		2-01-63	186.1*	175.0	
		2-15-63	187.1*	174.0	
		3-01-63	186.1*	175.0	
		4-02-63	205.1*	156.0	
		6-16-63	208.1*	153.0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH KERN WATER STORAGE DIST			5-22.37		
28S/26E-21H01 M	388.0	8-22-61	171.6	216.4	5000
		9-20-61	169.0	219.0	
		10-18-61	169.3	218.7	
		11-15-61	168.9	219.1	
		12-21-61	168.3	219.7	
		1-17-62	167.4	220.6	
		2-22-62	165.3	222.7	
		3-15-62	165.9	222.1	
		4-12-62	164.8	223.2	
		5-17-62	162.1	225.9	
		6-20-62	162.5	225.5	
		7-19-62	164.0	224.0	
		8-08-62	165.5	222.5	
		9-19-62	167.3	220.7	
		10-14-62	167.6	220.4	
		12-15-62	167.7	220.3	
		1-26-63	168.3	219.7	
		2-21-63	167.3	220.7	5000
		3-18-63	168.0	220.0	
		4-27-63	166.6	221.4	
		5-22-63	166.7	221.3	
		6-19-63	166.4	221.6	
28S/27E-21F01 M	611.0	10-04-62	DRY		6001
		1-28-63	DRY		
SHAFTER-WASCO IRRIGATION DIST			5-22.38		
27S/24E-01L02 M	322.0	7-21-61	277.1	44.9	5000
		8-23-61	285.0	37.0	
		9-20-61	238.1	83.9	
		10-19-61	227.9	94.1	
		11-16-61	204.5	117.5	
		12-21-61	180.2	141.8	
		1-18-62	179.7	142.3	
		2-22-62	170.9	151.1	
		3-15-62	172.3	149.7	
		4-12-62	207.1	114.9	
		5-18-62	210.2	111.8	
		6-21-62	239.7	82.3	
		7-19-62	263.4	58.6	
		8-08-62	263.7	58.3	
		9-20-62	237.9	84.1	
		10-14-62	215.0	107.0	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SHAFTER-WASCO IRRIGATION DIST			5-22.38		
27S/24E-01L02 M CONT.	322.0	11-25-62	188.6	133.4	
		12-15-62	186.5	135.5	
		1-26-63	199.9	122.1	
		2-21-63	207.1	114.9	
		3-19-63	209.5	112.5	
		4-28-63	205.2	116.8	
		5-22-63	211.0	111.0	
		6-19-63	207.9	114.1	
27S/24E-35C01 M	316.0	7-06-62	221.8*	94.2	8700
		7-18-62	234.8*	81.2	
		8-15-62	232.8*	83.2	
		8-31-62	239.8*	76.2	
		9-14-62	220.8*	95.2	
		1-04-63	190.8*	125.2	
		1-18-63	191.8*	124.2	
		2-07-63	190.8*	125.2	
		2-19-63	185.8*	130.2	
		3-05-63	190.8*	125.2	
		6-19-63	228.8*	87.2	
27S/25E-28A01 M	375.0	7-21-61	¤		5000
		8-22-61	290.4	84.6	
		9-20-61	248.5	126.5	
		10-19-61	235.1	139.9	
		11-16-61	227.6	147.4	
		12-21-61	211.8	163.2	
		1-17-62	214.5	160.5	
		2-22-62	¤		
		3-15-62	204.6	170.4	
		4-12-62	226.7	148.3	
		5-18-62	226.9	148.1	
		6-20-62	255.4	119.6	
		7-19-62	259.5	115.5	
		8-08-62	259.8	115.2	
		9-20-62	239.6	135.4	
		10-14-62	226.4	148.6	
		11-25-62	214.7	160.3	
		12-15-62	215.7	159.3	
		1-26-63	¤		
		2-21-63	¤		
		3-18-63	¤		
		4-27-63	228.2	146.8	
		5-22-63	231.1	143.9	
		6-19-63	¤		

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SHAFTER-WASCO IRRIGATION DIST			5-22.38		
28S/24E-01R01 M	329.0	10-09-62	189.0	140.0	6001
		1-30-63	163.0	166.0	
		6-01-63	#		
28S/25E-16D03 M	335.0	7-20-61	¤		5000
		8-22-61	¤		
		9-20-61	194.3*	140.7	
		10-19-61	181.6	153.4	
		11-16-61	169.5	165.5	
		12-21-61	175.2	159.8	
		1-17-62	174.6	160.4	
		2-22-62	172.7	162.3	
		3-15-62	169.2	165.8	
		4-12-62	175.0	160.0	
		5-17-62	172.1	162.9	
		6-20-62	¤		
		7-19-62	¤		
		8-08-62	185.7	149.3	
		9-20-62	183.7	151.3	
		10-14-62	181.4	153.6	
		11-25-62	179.3	155.7	
		12-15-62	178.9	156.1	
		2-21-63	175.8	159.2	
		3-18-63	174.8	160.2	
		4-27-63	179.2	155.8	
		5-22-63	181.0	154.0	
		6-19-63	183.5	151.5	
KERN RIVER DELTA AREA			5-22.40		
28S/24E-23D01 M	309.0	7-20-61	182.5	126.5	5000
		8-22-61	184.0	125.0	
		9-20-61	182.6	126.4	
		10-19-61	180.0	129.0	
		11-15-61	177.4	131.6	
		12-21-61	173.6	135.4	
		1-17-62	171.1	137.9	
		2-22-62	166.5	142.5	
		3-15-62	165.5	143.5	
		4-12-62	171.2	137.8	
		5-17-62	169.9	139.1	
		6-20-62	168.3	140.7	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KERN RIVER DELTA AREA			5-22.40		
28S/24E-23D01 M CONT.	309.0	7-19-62	182.6	126.4	5000
		8-08-62	183.9	125.1	
		9-20-62	182.6	126.4	
		10-14-62	179.7	129.3	
		11-25-62	178.1	130.9	
		12-15-62	175.9	133.1	
		1-26-63	173.0	136.0	
		2-21-63	170.9	138.1	
		3-18-63	169.4	139.6	
		4-28-63	173.5	135.5	
		5-22-63	172.7	136.3	
		6-19-63	180.9	128.1	
28S/25E-34J01 M	326.0	8-15-62	148.0	178.0	6001
		9-18-62	149.0	177.0	
		10-18-62	151.0	175.0	
		11-15-62	151.5	174.5	
		12-17-62	154.0	172.0	
		1-28-63	143.0	183.0	
		6-14-63	146.0	180.0	
28S/26E-29L01 M	349.0	7-02-62	161.1*	187.9	8700
		7-16-62	162.1*	186.9	
		8-01-62	163.1*	185.9	
		8-14-62	164.1*	184.9	
		9-06-62	149.1*	199.9	
		10-08-62	155.1	193.9	6001
		1-02-63	144.1*	204.9	8700
		1-15-63	142.1*	206.9	
		2-01-63	144.1*	204.9	
		2-15-63	144.1*	204.9	
		3-01-63	156.1*	192.9	
		5-03-63	151.1*	197.9	
		6-16-63	150.1*	198.9	
29S/25E-12M01 M	330.0	10-08-62	140.6	189.4	5120
		2-01-63	¤		
29S/25E-12M03 M	330.0	7-20-61	126.4	203.6	5000
		8-22-61	140.3	189.7	
		9-20-61	136.3	193.7	
		10-19-61	134.8	195.2	
		11-15-61	132.4	197.6	
		12-21-61	130.3	199.7	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KERN RIVER DELTA AREA			5-22.40		
29S/25E-12M03 M CONT.	330.0	1-17-62	130.4	199.6	5000
		2-21-62	128.2	201.8	
		3-15-62	127.8	202.2	
		4-12-62	132.7	197.3	
		5-17-62	134.5	195.5	
		6-20-62	139.3	190.7	
		7-19-62	143.3	186.7	
		8-08-62	145.1	184.9	
		9-20-62	144.4	185.6	
		10-14-62	141.4	188.6	
		11-18-62	140.5	189.5	
		12-14-62	135.5	194.5	
		1-25-63	137.8	192.2	
		2-20-63	138.9	191.1	
		3-17-63	140.9	189.1	
		4-28-63	137.8	192.2	
		5-22-63	142.0	188.0	
		6-19-63	145.1	184.9	
29S/26E-10L01 M	350.0	10-08-62	115.1	234.9	5120
		2-01-63	107.5	242.5	
29S/27E-33D01 M	382.0	7-20-61	75.1	306.9	5000
		8-22-61	79.2	302.8	
		9-20-61	92.4*	289.6	
		10-18-61	88.4	293.6	
		11-15-61	85.8	296.2	
		12-20-61	84.6	297.4	
		1-17-62	86.2	295.8	
		2-20-62	83.2	298.8	
		3-15-62	84.6	297.4	
		4-12-62	86.8	295.2	
		5-17-62	80.9	301.1	
		6-20-62	78.8	303.2	
		7-19-62	75.9	306.1	
		8-08-62	74.1	307.9	
		9-19-62	76.2	305.8	
		10-13-62	71.2	310.8	
		11-25-62	78.1	303.9	
		12-15-62	76.6	305.4	
		1-26-63	81.8	300.2	
		2-21-63	85.6	296.4	
		3-18-63	85.0	297.0	
		4-27-63	86.8	295.2	
		5-22-63	88.1	293.9	
		6-19-63	90.5	291.5	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KERN RIVER DELTA AREA			5-22.40		
29S/27E-34N01 M	385.0	7-19-61	72.0	313.0	5000
		8-22-61	74.6	310.4	
		9-20-61	76.1	308.9	
		10-18-61	77.4	307.6	
		11-15-61	78.3	306.7	
		12-20-61	79.3	305.7	
		1-17-62	80.1	304.9	
		2-21-62	80.7	304.3	
		3-15-62	81.3	303.7	
		4-12-62	82.1	302.9	
		5-17-62	82.3	302.7	
		6-20-62	82.1	302.9	
		7-17-62	81.5	303.5	
		8-08-62	81.1	303.9	
		9-20-62	79.4	305.6	
		10-13-62	78.5	306.5	
		11-18-62	77.5	307.5	
		12-14-62	68.6	316.4	
		1-25-63	76.8	308.2	
		2-20-63	77.5	307.5	
		3-17-63	78.4	306.6	
		4-27-63	79.2	305.8	
		5-22-63	80.4	304.6	
		6-19-63	81.8	303.2	
30S/25E-03H01 M	319.3	7-06-62	124.7*	194.6	8700
		7-20-62	128.7*	190.6	
		7-25-62	107.7	211.6	
		8-06-62	125.7*	193.6	
		8-21-62	129.7*	189.6	
		9-07-62	128.7*	190.6	
		1-14-63	94.7	224.6	
		1-23-63	94.7*	224.6	
		2-07-63	94.7*	224.6	
		2-20-63	88.7*	230.6	
		3-07-63	89.7*	229.6	
		5-21-63	83.7*	235.6	
		5-21-63	106.7*	212.6	
		6-25-63	132.7*	186.6	
30S/25E-22D01 M	308.5	7-06-61	52.5	256.0	4640
		8-02-61	52.6	255.9	
		9-06-61	52.9	255.6	
KERN RIVER DELTA AREA			5-22.40		
30S/25E-22D01 M CONT.	308.5	10-03-61	52.6	255.9	4640
		11-02-61	52.4	256.1	
		12-02-61	52.1	256.4	
		1-02-62	52.4	256.1	
		2-02-62	51.2	257.3	
		3-02-62	52.6	255.9	
		4-03-62	53.9	254.6	
		5-01-62	54.6	253.9	
		6-03-62	54.8	253.7	
		7-04-62	55.8	252.7	
		8-04-62	56.3	252.2	
		9-05-62	56.1	252.4	
		10-04-62	55.6	252.9	
		11-02-62	55.4	253.1	
		12-08-62	55.5	253.0	
		1-02-63	55.6	252.9	
		2-05-63	56.0	252.5	
		3-02-63	56.7	251.8	
		4-02-63	57.2	251.3	
		6-04-63	58.9	249.6	
30S/26E-16J01 M	339.1	10-05-62	53.7	285.4	5120
		1-30-63	57.3	281.8	
30S/26E-22P02 M	338.0	7-19-61	68.3	269.7	5000
		8-22-61	70.8	267.2	
		9-19-61	71.1	266.9	
		10-17-61	63.9	274.1	
		11-14-61	65.5	272.5	
		12-20-61	58.1	279.9	
		1-16-62	57.5	280.5	
		2-21-62	56.7	281.3	
		3-14-62	56.9	281.1	
		4-11-62	62.5	275.5	
		5-16-62	63.7	274.3	
		6-19-62	69.3	268.7	
		7-18-62	69.0	269.0	
		8-08-62	74.9	263.1	
		9-19-62	66.0	272.0	
		10-13-62	68.4	269.6	
		11-18-62	62.5	275.5	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KERN RIVER DELTA AREA			5-22.40		
30S/26E-22P02 M CONT.	338.0	12-14-62	63.4	274.6	5000
		1-25-63	62.9	275.1	
		2-20-63	63.3	274.7	
		3-17-63	63.9	274.1	
		4-27-63	68.6	269.4	
		5-22-63	70.9	267.1	
		6-19-63	75.9	262.1	
30S/26E-27A01 M	338.7	7-06-62	84.7*	254.0	8700
		7-23-62	83.7*	255.0	
		8-07-62	84.7*	254.0	
		8-22-62	84.7*	254.0	
		8-27-62	82.7*	256.0	
		9-10-62	73.7*	265.0	
		1-11-63	72.7*	266.0	
		1-18-63	71.7*	267.0	
		2-07-63	69.7*	269.0	
		2-20-63	82.7*	256.0	
		3-06-63	88.7*	250.0	
		6-24-63	84.7*	254.0	
30S/27E-03G01 M	384.2	7-09-62	125.2*	259.0	8700
		7-20-62	□		
		8-07-62	127.2*	257.0	
		8-20-62	111.2*	273.0	
		9-07-62	108.2*	276.0	
		9-08-62	#		
30S/27E-28A02 M	359.0	10-05-62	95.7	263.3	5120
		1-31-63	94.0	265.0	
30S/28E-32B01 M	354.4	10-01-62	□		6001
		1-29-63	105.8	248.6	
30S/28E-34R02 M	359.0	7-18-62	106.1	252.9	5000
		8-07-62	107.5	251.5	
		9-19-62	102.9	256.1	
		10-13-62	98.8	260.2	
		11-18-62	95.0	264.0	
		12-14-62	94.9	264.1	
		1-25-63	93.5	265.5	
		2-20-63	93.2	265.8	
		3-17-63	97.2	261.8	
KERN RIVER DELTA AREA			5-22.40		
30S/28E-34R02 M CONT.	359.0	4-27-63	95.7	263.3	5000
		5-22-63	101.2	257.8	
		6-18-63	100.3	258.7	
31S/26E-01A01 M	333.0	10-02-62	65.6	267.4	5120
		1-31-63	73.7	259.3	
31S/26E-35D01 M	294.5	10-02-62	56.7	237.8	5120
		1-29-63	46.2	248.3	
31S/27E-04L01 M	341.1	7-11-62	130.6*	210.5	8700
		7-25-62	132.6*	208.5	
		8-07-62	135.6*	205.5	
		8-16-62	132.6*	208.5	
		8-16-62	120.6*	220.5	
		9-10-62	128.6*	212.5	
		1-08-63	93.6	247.5	
		1-21-63	95.6	245.5	
		2-11-63	92.6	248.5	
		2-25-63	96.6*	244.5	
		3-07-63	112.6*	228.5	
		5-03-63	124.6*	216.5	
		6-25-63	144.6*	196.5	
31S/27E-28H01 M	310.0	7-19-61	□		5000
		8-22-61	□		
		9-19-61	80.1	229.9	
		10-17-61	70.7	239.3	
		11-14-61	65.4	244.6	
		12-20-61	60.4	249.6	
		1-16-62	□		
		2-21-62	□		
		3-14-62	□		
		4-11-62	□		
		5-16-62	67.3	242.7	
		6-19-62	□		
		7-18-62	□		
		8-07-62	□		
		9-19-62	74.9	235.1	
		10-13-62	69.9	240.1	
		11-18-62	64.5	245.5	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
KERN RIVER DELTA AREA			5-22.40		
31S/27E-28H01 M CONT.	310.0	1-26-63	□		5000
		2-19-63	□		
		3-17-63	□		
		4-27-63	□		
		5-21-63	73.3	236.7	
		6-18-63	□		
31S/27E-28J01 M	312.1	10-03-62	52.1	260.0	5120
		1-30-63	63.2	248.9	
31S/28E-17P02 M	321.1	10-02-62	□		6001
		1-29-63	□		
31S/28E-30M01 M	314.7	7-11-62	142.0*	172.7	8700
		7-25-62	86.0	228.7	
		8-08-62	140.0*	174.7	
		8-22-62	140.0*	174.7	
		9-11-62	85.0	229.7	
		9-25-62	109.0*	205.7	
		1-08-63	120.0*	194.7	
		1-21-63	127.0*	187.7	
		2-11-63	70.0*	244.7	
		2-21-63	65.0*	249.7	
		3-11-63	139.0*	175.7	
		6-25-63	80.0	234.7	
32S/26E-36G01 M	378.0	10-01-62	174.2	203.8	5120
		1-29-63	211.2	166.8	
32S/27E-18E01 M	292.6	7-11-62	190.3*	102.3	8700
		7-26-62	143.3	149.3	
		8-08-62	192.3*	100.3	
		8-23-62	195.3*	97.3	
		9-10-62	153.3	139.3	
		1-09-63	125.3*	167.3	
		1-28-63	184.3*	108.3	8700
		2-11-63	189.3*	103.3	
		2-21-63	□		
		3-08-63	168.3*	124.3	
		6-26-63	178.3*	114.3	
32S/28E-04A01 M	303.0	10-01-62	□		6001
		1-30-63	□		

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
EDISON-MARICOPA AREA			5-22.41		
29S/29E-33N01 M	578.0	10-03-62	449.0	129.0	6001
		1-30-63	436.1	141.9	
30S/28E-02R01 M	410.0	10-03-62	173.2	236.8	6001
		1-29-63	174.0	236.0	
30S/28E-10N01 M	372.0	7-20-61	146.5*	225.5	5000
		8-22-61	34.5	337.5	
		9-20-61	34.8	337.2	
		10-18-61	33.9	338.1	
		11-15-61	33.2	338.8	
		12-20-61	32.5	339.5	
		1-17-62	33.4	338.6	
		2-21-62	34.5	337.5	
		3-15-62	34.9	337.1	
		4-11-62	36.1	335.9	
		5-17-62	38.5	333.5	
		6-19-62	38.1	333.9	
		7-18-62	37.0	335.0	
		8-07-62	36.4	335.6	
		9-19-62	34.9	337.1	
		10-13-62	35.0	337.0	
		11-18-62	34.0	338.0	
		12-14-62	34.0	338.0	
		1-25-63	34.7	337.3	
		2-20-63	35.5	336.5	
		3-17-63	36.0	336.0	
		4-27-63	39.3	332.7	
		5-22-63	41.8	330.2	
		6-19-63	38.8	333.2	
30S/28E-10N04 M	372.0	7-20-61	146.3	225.7	5000
		8-22-61	149.1	222.9	
		9-20-61	149.8	222.2	
		10-18-61	141.3	230.7	
		11-15-61	138.3	233.7	
		12-20-61	135.6	236.4	
		1-17-62	134.8	237.2	
		2-21-62	133.2	238.8	
		3-15-62	133.6	238.4	
		4-11-62	139.6	232.4	

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
EDISON-MARICOPA AREA			5-22.41		
30S/28E-10N04 M CONT.	372.0	5-17-62	142.2	229.8	5000
		6-19-62	147.1	224.9	
		7-18-62	153.8	218.2	
		8-07-62	156.4	215.6	
		9-19-62	153.6	218.4	
		10-13-62	149.2	222.8	
		11-18-62	145.8	226.2	
		12-14-62	144.2	227.8	
		1-25-63	143.4	228.6	
		2-20-63	142.5	229.5	
		3-17-63	143.8	228.2	
		4-27-63	146.8	225.2	
		5-22-63	152.6	219.4	
		6-18-63	152.9	219.1	
30S/29E-05F01 M	515.0	10-02-62	335.1	179.9	6001
		1-30-63	331.7	183.3	
30S/29E-26A01 M	628.0	10-02-62	467.0	161.0	6001
		1-28-63	455.5	172.5	
30S/29E-31R01 M	421.0	7-18-62	131.9	289.1	5000
		8-07-62	131.5	289.5	
		9-19-62	130.3	290.7	
		10-13-62	131.3	289.7	
		11-18-62	131.0	290.0	
		12-14-62	131.7	289.3	
		1-25-63	130.7	290.3	
		2-20-63	130.5	290.5	
		3-17-63	130.5	290.5	
		4-27-63	131.1	289.9	
		5-22-63	134.2	286.8	
		6-18-63	130.2	290.8	
30S/30E-20R01 M	791.5	10-04-62	190.7	600.8	6001
		1-29-63	183.5	608.0	
31S/29E-09A01 M	472.5	10-03-62	¤		6001
		1-30-63	297.9	174.6	
31S/29E-29A01 M	400.0	10-02-62	153.1	246.9	6001
		1-31-63	¤		
EDISON-MARICOPA AREA			5-22.41		
31S/30E-18B01 M	513.5	7-20-61	323.6	189.9	5000
		8-22-61	336.0	177.5	
		9-20-61	336.1	177.4	
		10-18-61	337.4	176.1	
		11-14-61	336.8	176.7	
		12-20-61	¤		
		1-17-62	334.5	179.0	
		2-21-62	336.4	177.1	
		3-14-62	333.1	180.4	
		4-11-62	334.5	179.0	
		5-17-62	335.8	177.7	
		6-20-62	337.8	175.7	
		7-18-62	338.2	175.3	
		8-07-62	341.3	172.2	
		9-19-62	342.6	170.9	
		10-13-62	#		
31S/30E-21G01 M	536.0	10-01-62	¤		6001
		1-31-63	¤		
32S/25E-35N02 M	442.5	10-01-62	234.0	208.5	5120
		1-28-63	238.0	204.5	
32S/28E-23R01 M	386.7	10-01-62	305.0	81.7	6001
		1-30-63	¤		
32S/29E-16R02 M	470.0	7-18-62	314.7*	155.3	5000
		8-07-62	316.1	153.9	
		9-19-62	317.5	152.5	
		10-13-62	317.0	153.0	
		11-18-62	317.4	152.6	
		12-14-62	315.4	154.6	
		1-25-63	314.0	156.0	
		2-20-63	313.4	156.6	
		3-17-63	314.1	155.9	
		4-27-63	315.4	154.6	
		5-21-63	316.2	153.8	
		6-18-63	316.5	153.5	
32S/29E-19H02 M	416.0	7-20-61	160.4*	255.6	5000

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
EDISON-MARICOPA AREA			5-22.41		
32S/29E-19H02 M CONT.	416.0	8-22-61	166.5	249.5	5000
		9-20-61	153.0	263.0	
		10-18-61	151.2	264.8	
		11-15-61	147.4	268.6	
		12-20-61	146.1	269.9	
		1-17-62	145.5	270.5	
		2-21-62	141.8	274.2	
		3-14-62	143.8	272.2	
		4-11-62	146.7	269.3	
		5-17-62	152.3	263.7	
		6-20-62	171.7	244.3	
		7-18-62	182.6	233.4	
		8-07-62	189.5	226.5	
		9-19-62	189.0	227.0	
		10-13-62	173.8	242.2	
		11-18-62	170.2	245.8	
		12-14-62	177.4	238.6	
		1-25-63	177.1	238.9	
		2-20-63	178.6	237.4	
		3-17-63	181.4	234.6	
		4-27-63	182.3	233.7	
		5-21-63	189.4	226.6	
		6-18-63	184.2	231.8	
32S/29E-19H03 M	416.0	7-20-61	365.1	50.9	5000
		8-22-61	355.3	60.7	
		9-20-61	322.3	93.7	
		10-18-61	303.7	112.3	
		11-15-61	303.5	112.5	
		12-20-61	292.1	123.9	
		1-17-62	291.4	124.6	
		2-21-62	282.1	133.9	
		3-14-62	276.3	139.7	
		4-11-62	310.1	105.9	
		5-17-62	314.6	101.4	
		6-20-62	338.5	77.5	
		7-18-62	357.3	58.7	
		8-07-62	363.8	52.2	
		9-19-62	337.9	78.1	
		10-13-62	321.0	95.0	
		11-18-62	296.8	119.2	
		12-14-62	295.3	120.7	
		1-25-63	295.7	120.3	
		2-20-63	301.5	114.5	
		3-17-63	315.1	100.9	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
EDISON-MARICOPA AREA			5-22.41		
32S/29E-19H03 M CONT.	416.0	4-27-63	314.0	102.0	5000
		5-21-63	325.8	90.2	
		6-18-63	338.3	77.7	
32S/29E-21P01 M	473.0	7-18-62	212.3	260.7	5000
		8-07-62	213.0	260.0	
		9-19-62	210.2	262.8	
		10-13-62	209.0	264.0	
		11-18-62	208.7	264.3	
		12-14-62	207.5	265.5	
		1-25-63	208.0	265.0	
		2-20-63	208.4	264.6	
		3-17-63	209.5	263.5	
		4-27-63	216.6	256.4	
		5-21-63	217.7	255.3	
		6-18-63	257.0	216.0	
11N/18W-06P01 S	657.0	10-03-62	□		6001
		1-29-63	□		
11N/18W-28D01 S	850.0	10-04-62	132.7	717.3	6001
		1-29-63	97.7	752.3	
11N/19W-04H01 S	575.9	10-03-62	□		6001
		1-30-63	□		
11N/19W-07R03 S	675.0	8-22-61	446.0	229.0	5000
		9-20-61	442.3	232.7	
		10-18-61	441.9	233.1	
		11-15-61	439.1	235.9	
		12-20-61	438.2	236.8	
		1-17-62	438.7	236.3	
		2-21-62	437.4	237.6	
		3-14-62	440.1	234.9	
		4-11-62	440.6	234.4	
		5-17-62	442.1	232.9	
		6-20-62	□		
		7-18-62	□		
		8-07-62	455.1	219.9	
		9-19-62	451.2	223.8	
		10-13-62	450.1	224.9	
		11-18-62	443.6	231.4	
		2-20-63	448.2	226.8	
		3-17-63	449.7	225.3	
		4-27-63	455.2	219.8	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
EDISON-MARICOPA AREA			5-22.41		
11N/19W-07R03 S CONT.	675.0	5-21-63	456.9	218.1	5000
		6-18-63	459.8	215.2	
11N/20W-07Q01 S	452.3	7-10-62	□		8700
		7-23-62	632.9*	- 180.6	
		7-26-62	632.9*	- 180.6	
		8-09-62	632.9*	- 180.6	
		9-05-62	629.9*	- 177.6	
		9-12-62	620.9*	- 168.6	
		10-24-62	565.9*	- 113.6	
		1-10-63	375.9*	76.4	
		1-22-63	567.9*	- 115.6	
		2-12-63	□		
		2-25-63	□		
		3-11-63	□		
		4-03-63	□		
		4-24-63	590.9*	- 138.6	
		5-15-63	549.9*	- 97.6	
		6-28-63	552.9*	- 100.6	
11N/20W-18F01 S	484.7	10-02-62	349.5	135.2	6001
		1-28-63	344.5	140.2	
11N/20W-24A01 S	730.2	7-10-62	□		8700
		7-23-62	□		
		7-24-62	498.6	231.6	
		7-24-62	505.6*	224.6	
		8-09-62	506.6*	223.6	
		9-05-62	497.6*	232.6	
		9-12-62	498.6*	231.6	
		10-24-62	497.6*	232.6	
		1-10-63	496.6*	233.6	
		1-22-63	496.6*	233.6	
		2-12-63	497.6*	232.6	
		2-25-63	498.6*	231.6	
		3-11-63	504.6*	225.6	
		4-24-63	502.6*	227.6	
		5-15-63	505.6*	224.6	
		6-28-63	□		
11N/21W-05M01 S	515.9	7-10-62	□		8700
		7-23-62	□		
		8-09-62	□		
		9-05-62	□		
		9-12-62	478.1	37.8	
EDISON-MARICOPA AREA			5-22.41		
11N/21W-05M01 S CONT.	515.9	10-25-62	468.1	47.8	8700
		1-10-63	□		
		1-22-63	□		
		2-25-63	□		
		3-11-63	□		
		4-24-63	□		
		5-15-63	□		
		6-28-63	□		
11N/22W-04H01 S	529.0	7-10-62	□		8700
		7-23-62	□		
		8-09-62	□		
		9-05-62	458.3	70.7	
		9-12-62	449.3	79.7	
		10-25-62	□		
		1-10-63	□		
		1-22-63	448.3	80.7	
		2-04-63	473.3*	55.7	
		2-25-63	□		
		3-11-63	□		
		4-24-63	□		
		5-15-63	452.3	76.7	
		6-28-63	□		
11N/23W-12P01 S	747.0	10-04-62	□		5120
		1-28-63	□		
12N/20W-31R01 S	363.0	10-01-62	238.8	124.2	6001
		1-28-63	237.2	125.8	
12N/20W-36Q02 S	509.0	10-02-62	194.0	315.0	6001
		1-29-63	192.5	316.5	
12N/21W-29N01 S	423.3	10-03-62	315.5	107.8	5120
		1-29-63	320.0	103.3	
12N/23W-28P01 S	498.0	10-01-62	271.9	226.1	5120
		1-29-63	275.0	223.0	
BUENA VISTA WATER STORAGE DIST			5-22.42		
27S/22E-16B01 M	238.0	7-17-62	84.9	153.1	5000
		8-07-62	90.5	147.5	
		9-18-62	96.5	141.5	
		10-20-62	81.9	156.1	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
BUENA VISTA WATER STORAGE DIST			5-22.42		
27S/22E-16B01 M CONT.	238.0	11-23-62	72.8	165.2	5000
		12-20-62	69.1	168.9	
		1-22-63	78.2	159.8	
		2-19-63	¤		
		3-18-63	◻		
		4-20-63	77.3	160.7	
		5-21-63	78.8	159.2	
		6-18-63	73.0	165.0	
27S/22E-21F02 M	240.0	10-10-62	39.8	200.2	5120
		2-05-63	44.0	196.0	
27S/22E-32H01 M	241.0	7-17-62	83.4	157.6	5000
		8-07-62	86.8	154.2	
		9-18-62	103.4	137.6	
		10-20-62	99.2	141.8	
		11-23-62	93.0	148.0	
		12-20-62	96.6	144.4	
		1-22-63	86.0	155.0	
		2-19-63	82.2	158.8	
		3-18-63	79.8	161.2	
		4-20-63	98.5	142.5	
		5-21-63	93.0	148.0	
		6-18-63	90.7	150.3	
28S/22E-09D01 M	245.0	7-19-61	39.9	205.1	5000
		8-21-61	41.9	203.1	
		9-19-61	38.5	206.5	
		10-17-61	36.2	208.8	
		11-14-61	39.3	205.7	
		12-19-61	45.3*	199.7	
		1-16-62	45.8	199.2	
		2-20-62	49.0	196.0	
		3-13-62	48.2	196.8	
		4-10-62	52.0	193.0	
		5-16-62	35.2	209.8	
		6-19-62	36.1	208.9	
		7-17-62	40.8	204.2	
		8-07-62	45.3	199.7	
		9-18-62	46.0	199.0	
		10-20-62	48.1	196.9	
		11-23-62	47.4	197.6	
		12-20-62	46.9	198.1	
		1-22-63	47.3	197.7	
		2-19-63	49.4	195.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
BUENA VISTA WATER STORAGE DIST			5-22.42		
28S/22E-09D01 M CONT.	245.0	3-18-63	49.8	195.2	5000
		4-20-63	43.7	201.3	
		5-21-63	37.9	207.1	
		6-18-63	53.4	191.6	
28S/22E-10D02 M	245.0	10-10-62	¤		5120
		2-04-63	¤		
28S/22E-36P01 M	253.2	7-04-62	46.0	207.2	4640
		8-03-62	◻		
		9-05-62	45.2	208.0	
		10-04-62	46.0	207.2	
		11-02-62	32.4	220.8	
		12-08-62	30.2	223.0	
		1-02-63	33.5	219.7	
		2-05-63	¤		
		3-02-63	47.2	206.0	
		4-02-63	37.7	215.5	
		5-01-63	33.9	219.3	
		6-04-63	33.0	220.2	
28S/23E-31R01 M	257.8	7-02-62	44.7	213.1	4640
		8-03-62	57.2	200.6	
		9-04-62	62.4	195.4	
		10-03-62	33.8	224.0	
		11-02-62	31.6	226.2	
		12-07-62	32.2	225.6	
		1-02-63	32.0	225.8	
		2-04-63	50.6	207.2	
		3-01-63	◻		
		4-02-63	47.4	210.4	
		5-01-63	38.2	219.6	
		6-04-63	40.3	217.5	
29S/23E-08A01 M	260.3	7-03-62	56.5	203.8	4640
		8-03-62	61.8	198.5	
		9-04-62	55.4	204.9	
		10-03-62	38.0	222.3	
		11-02-62	35.6	224.7	
		12-07-62	37.6	222.7	
		1-02-63	36.1	224.2	
		2-04-63	63.5	196.8	
		3-01-63	◻		
		4-02-63	54.0	206.3	
		5-01-63	45.4	214.9	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
BUENA VISTA WATER STORAGE DIST			5-22.42		
29S/23E-08A01 M CONT.	260.3	6-04-63	43.8	216.5	4640
29S/23E-10P01 M	263.5	7-06-61	□		4640
		8-02-61	91.7	171.8	
		9-06-61	52.0	211.5	
		10-03-61	46.0	217.5	
		11-02-61	42.5	221.0	
		12-02-61	41.8	221.7	
		1-02-62	38.5	225.0	
		2-02-62	37.7	225.8	
		3-02-62	42.4	221.1	
		4-03-62	41.3	222.2	
		5-01-62	36.6	226.9	
		6-02-62	35.3	228.2	
		7-04-62	□		
		8-03-62	53.3	210.2	
		9-05-62	66.7	196.8	
		10-04-62	38.8	224.7	
		11-03-62	33.4	230.1	
		12-08-62	52.1	211.4	
		1-03-63	34.7	228.8	
		2-05-63	□		
		3-02-63	68.9	194.6	
		4-02-63	42.2	221.3	
		6-04-63	55.7	207.8	
29S/23E-27M01 M	270.0	7-19-61	□		5000
		8-21-61	□		
		9-19-61	47.4	222.6	
		10-17-61	46.2	223.8	
		11-14-61	45.6	224.4	
		12-19-61	45.9	224.1	
		1-16-62	46.0	224.0	
		2-20-62	□		
		3-14-62	□		
		4-10-62	45.4	224.6	
		5-16-62	43.8	226.2	
		6-19-62	44.4	225.6	
		7-17-62	43.8	226.2	
		8-07-62	□		
		9-18-62	45.0	225.0	
		10-13-62	44.1	225.9	
		11-18-62	44.0	226.0	
		12-20-62	43.2	226.8	
		1-23-63	44.1	225.9	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
BUENA VISTA WATER STORAGE DIST			5-22.42		
29S/23E-27M01 M CONT.	270.0	2-19-63	□		5000
		3-17-63	□		
		4-20-63	45.8	224.2	
		5-21-63	44.8	225.2	
		6-18-63	44.2	225.8	
29S/24E-32Q01 M	280.7	7-04-62	59.2	221.5	4640
		8-04-62	74.4	206.3	
		9-05-62	66.7	214.0	
		10-04-62	55.7	225.0	
		11-03-62	55.0	225.7	
		12-08-62	55.6	225.1	
		1-02-63	55.2	225.5	
		2-05-63	69.6	211.1	
		3-02-63	87.0	193.7	
		4-02-63	59.6	221.1	
		5-01-63	58.1	222.6	
		6-04-63	59.9	220.8	
30S/23E-01C01 M	276.8	7-02-62	49.7	227.1	4640
		8-03-62	48.3	228.5	
		9-04-62	54.7	222.1	
		10-03-62	53.2	223.6	
		11-02-62	54.3	222.5	
		12-07-62	51.2	225.6	
		1-02-63	32.8	244.0	
		2-04-63	28.7	248.1	
		3-01-63	33.0	243.8	
		4-02-63	26.5	250.3	
		5-01-63	29.0	247.8	
		6-04-63	29.6	247.2	
30S/24E-02C01 M	287.0	7-03-62	65.9	221.1	4640
		8-03-62	67.0	220.0	
		9-04-62	69.6	217.4	
		10-03-62	64.8	222.2	
		11-02-62	64.3	222.7	
		12-07-62	□		
		1-02-63	□		
		2-04-63	68.4	218.6	
		3-01-63	71.7	215.3	
		4-02-63	67.2	219.8	
		5-01-63	66.8	220.2	
		6-04-63	□		
30S/24E-04C01 M	282.0	7-19-61	129.1*	152.9	5000

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
BUENA VISTA WATER STORAGE DIST			5-22.42		
30S/24E-04C01 M CONT.	282.0	8-21-61	83.5	198.5	5000
		9-19-61	60.5	221.5	
		10-17-61	57.8	224.2	
		11-14-61	58.4	223.6	
		12-19-61	57.3	224.7	
		1-16-62	63.3	218.7	
		2-20-62	56.7	225.3	
		3-14-62	62.4	219.6	
		4-10-62	58.9	223.1	
		5-16-62	57.6	224.4	
		6-19-62	61.9	220.1	
		7-17-62	61.5	220.5	
		8-07-62	72.6	209.4	
		9-18-62	60.2	221.8	
		10-13-62	57.8	224.2	
		11-23-62	55.5	226.5	
		12-20-62	56.8	225.2	
		1-23-63	53.5	228.5	
		2-19-63	53.6	228.4	
		3-17-63	55.0	227.0	
		4-20-63	63.7	218.3	
		5-21-63	66.8	215.2	
		6-18-63	65.8	216.2	
31S/25E-27F01 M	283.0	7-19-61	39.1	243.9	5000
		8-22-61	□		
		9-19-61	50.0	233.0	
		10-17-61	56.8	226.2	
		11-14-61	58.1	224.9	
		12-19-61	□		
		1-16-62	32.8	250.2	
		2-20-62	□		
		3-14-62	20.7	262.3	
		4-11-62	26.0	257.0	
		5-16-62	24.9	258.1	
		6-19-62	39.2	243.8	
		7-18-62	28.7	254.3	
		8-07-62	25.7	257.3	
		9-18-62	30.2	252.8	
		10-13-62	41.6	241.4	
		12-14-62	43.4	239.6	
		1-23-63	44.0	239.0	
		2-19-63	34.0	249.0	
		3-17-63	35.6	247.4	
		4-28-63	□		
BUENA VISTA WATER STORAGE DIST			5-22.42		
31S/25E-27F01 M CONT.	283.0	5-21-63	36.6	246.4	5000
		6-18-63	27.4	255.6	
SEMITROPIC WATER STORAGE DIST			5-22.43		
25S/22E-02E01 M	212.0	7-20-62	99.1	112.9	5000
		8-08-62	105.9	106.1	
		9-18-62	108.0	104.0	
		10-20-62	108.3	103.7	
		11-25-62	110.5	101.5	
		12-15-62	104.5	107.5	
		1-23-63	108.5	103.5	
		2-21-63	111.1	100.9	
		3-18-63	114.0	98.0	
		4-20-63	@		
25S/22E-02N02 M	212.0	7-20-62	40.1	171.9	5000
		8-08-62	41.6	170.4	
		9-18-62	40.1	171.9	
		10-20-62	45.1	166.9	
		11-25-62	41.5	170.5	
		12-15-62	41.7	170.3	
		1-23-63	42.8	169.2	
		2-21-63	44.0	168.0	
		3-18-63	45.5	166.5	
		4-28-63	46.9	165.1	
		5-22-63	51.1	160.9	
		6-19-63	58.2	153.8	
25S/22E-14G01 M	215.0	10-10-62	170.7	44.3	5120
		2-06-63	140.5	74.5	
25S/23E-03R01 M	209.0	10-11-62	□		5120
		2-07-63	□		
25S/23E-28D01 M	217.0	7-21-61	84.8	132.2	5000
		8-23-61	88.4	128.6	
		9-20-61	88.9	128.1	
		10-19-61	86.0	131.0	
		11-16-61	84.9	132.1	
		12-21-61	80.1	136.9	
		1-18-62	77.3	139.7	
		2-22-62	□		
		3-15-62	71.6	145.4	
		4-13-62	73.8	143.2	

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SEMITROPIC WATER STORAGE DIST			5-22.43		
25S/23E-28D01 M CONT.	217.0	5-18-62	74.2	142.8	5000
		6-21-62	76.5	140.5	
		7-19-62	81.4	135.6	
		8-08-62	85.9	131.1	
		9-20-62	87.3	129.7	
		10-19-62	90.1	126.9	
		11-25-62	88.9	128.1	
		12-15-62	82.8	134.2	
		1-26-63	79.0	138.0	
		2-21-63	77.6	139.4	
		3-18-63	76.5	140.5	
		4-28-63	◻		
		5-22-63	78.1	138.9	
		6-19-63	79.2	137.8	
25S/23E-28D03 M	217.0	7-21-61	202.1	14.9	5000
		8-23-61	210.5	6.5	
		9-20-61	212.0	5.0	
		10-19-61	195.6	21.4	
		11-16-61	171.7	45.3	
		12-21-61	149.4	67.6	
		1-18-62	137.1	79.9	
		2-22-62	◻		
		3-15-62	120.0	97.0	
		4-13-62	134.7	82.3	
		5-18-62	142.9	74.1	
		6-21-62	161.4	55.6	
		7-19-62	189.7	27.3	
		8-08-62	206.7	10.3	
		9-20-62	206.4	10.6	
		10-14-62	202.5	14.5	
		11-25-62	168.5	48.5	
		12-15-62	158.2	58.8	
		1-26-63	149.1	67.9	
		2-21-63	146.2	70.8	
		3-18-63	146.3	70.7	
		5-22-63	155.3	61.7	
		6-19-63	153.4	63.6	
25S/24E-07R01 M	228.0	10-09-62	96.8	131.2	6001
		1-31-63	89.0	139.0	
25S/24E-15H01 M	248.0	7-21-61	89.0	159.0	5000
		8-23-61	89.5	158.5	
		9-21-61	89.9	158.1	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SEMITROPIC WATER STORAGE DIST			5-22.43		
25S/24E-15H01 M CONT.	248.0	10-19-61	86.9	161.1	5000
		11-16-61	89.2	158.8	
		12-21-61	88.9	159.1	
		1-18-62	88.9	159.1	
		2-22-62	88.5	159.5	
		3-15-62	88.1	159.9	
		4-13-62	88.3	159.7	
		5-18-62	88.7	159.3	
		6-21-62	88.2	159.8	
		7-19-62	89.9	158.1	
		8-08-62	90.1	157.9	
		9-20-62	90.5	157.5	
		10-14-62	90.5	157.5	
		11-25-62	88.8	159.2	
		12-15-62	89.1	158.9	
		1-25-63	88.4	159.6	
		2-22-63	87.7	160.3	
		3-18-63	87.6	160.4	
		4-28-63	88.6	159.4	
		5-23-63	88.7	159.3	
		6-19-63	88.9	159.1	
25S/24E-30H01 M	237.4	10-08-62	◻		6001
		1-31-63	149.5	87.9	
26S/21E-14E01 M	244.0	7-17-62	40.8	203.2	5000
		8-07-62	41.0	203.0	
		9-18-62	38.2	205.8	
		10-20-62	37.5	206.5	
		11-23-62	37.3	206.7	
		12-20-62	39.2	204.8	
		1-22-63	39.1	204.9	
		2-19-63	38.8	205.2	
		3-18-63	39.5	204.5	
		4-20-63	40.5	203.5	
		5-21-63	39.2	204.8	
		6-18-63	39.5	204.5	
26S/21E-14J01 M	237.0	10-10-62	26.2	210.8	5120
		2-06-63	35.5	201.5	
26S/22E-10G01 M	225.0	7-20-62	◻		5000
		8-08-62	75.5	149.5	
		9-18-62	◻		
		10-20-62	◻		

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SEMITROPIC WATER STORAGE DIST		5-22.43			
26S/22E-10G01 M CONT.	225.0	11-25-62	¤		5000
		12-15-62	76.6	148.4	
		1-26-63	66.3	158.7	
		2-21-63	62.2	162.8	
		3-18-63	60.2	164.8	
		4-28-63	¤		
		5-22-63	64.7	160.3	
		6-19-63	66.5	158.5	
26S/22E-35E01 M	253.0	10-11-62	114.0	139.0	5120
		2-06-63	115.0	138.0	
26S/23E-02R01 M	234.9	10-11-62	139.5	95.4	5120
		2-07-63	134.0	100.9	
26S/23E-36F01 M	258.0	10-11-62	¤		5120
		2-07-63	¤		
26S/24E-23H01 M	295.5	7-05-62	285.8*	9.7	8700
		7-17-62	293.8*	1.7	
		8-13-62	293.8*	1.7	
		8-30-62	302.8*	-7.3	
		9-12-62	279.8*	15.7	
		10-15-62	201.8*	93.7	
		1-03-63	188.8*	106.7	
		1-16-63	196.8*	98.7	
		2-06-63	170.8*	124.7	
		2-18-63	163.8*	131.7	
		3-04-63	189.8*	105.7	
		6-18-63	214.8*	80.7	
27S/22E-02Q01 M	265.0	10-09-62	61.2	203.8	5120
		2-05-63	64.5	200.5	
27S/23E-01R01 M	267.0	7-21-61	¤		5000
		8-23-61	110.7	156.3	
		9-20-61	109.8	157.2	
		10-19-61	109.0	158.0	
		11-16-61	98.3	168.7	
		12-21-61	107.8*	159.2	
		1-18-62	107.5	159.5	
		2-22-62	106.3	160.7	
		3-15-62	107.5	159.5	
		4-12-62	107.9	159.1	
		5-18-62	108.1	158.9	
SEMITROPIC WATER STORAGE DIST		5-22.43			
27S/23E-01R01 M CONT.	267.0	6-21-62	109.8	157.2	5000
		7-19-62	111.0	156.0	
		8-08-62	111.3	155.7	
		9-20-62	111.1	155.9	
		10-14-62	110.9	156.1	
		11-25-62	110.3	156.7	
		12-15-62	109.2	157.8	
		1-26-63	109.6	157.4	
		2-21-63	109.9	157.1	
		3-19-63	110.3	156.7	
		4-28-63	110.4	156.6	
		5-22-63	110.2	156.8	
		6-19-63	110.9	156.1	
27S/23E-01R04 M	267.0	7-21-61	252.7	14.3	5000
		8-23-61	249.9	17.1	
		9-20-61	217.1	49.9	
		10-19-61	200.2	66.8	
		11-16-61	183.2	83.8	
		12-21-61	163.8	103.2	
		1-18-62	161.3	105.7	
		2-22-62	149.6	117.4	
		3-15-62	148.7	118.3	
		4-12-62	185.8	81.2	
		5-18-62	184.3	82.7	
		6-21-62	216.0	51.0	
		7-19-62	247.8	19.2	
		8-08-62	249.7	17.3	
		9-20-62	230.6	36.4	
		10-14-62	202.4	64.6	
		11-25-62	174.5	92.5	
		12-15-62	168.5	98.5	
		1-26-63	175.0	92.0	
		2-21-63	178.9	88.1	
		3-18-63	186.0	81.0	
		4-28-63	186.6	80.4	
		5-22-63	188.9	78.1	
		6-19-63	196.1	70.9	
27S/23E-06L01 M	258.0	10-09-62	66.0	192.0	5120
		2-05-63	61.0	197.0	
28S/23E-11E01 M	255.0	7-03-62	39.5	215.5	4640
		8-03-62	34.6	220.4	
		9-05-62	30.3	224.7	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SEMITROPIC WATER STORAGE DIST			5-22.43		
28S/23E-11E01 M CONT.	255.0	10-04-62	30.9	224.1	4640
		11-02-62	29.3	225.7	
		12-08-62	29.8	225.2	
		1-03-63	30.3	224.7	
		2-05-63	28.0	227.0	
		3-02-63	27.7	227.3	
		4-02-63	29.3	225.7	
		5-01-63	28.1	226.9	
		6-04-63	36.2	218.8	
S/24E-28A01 M	301.1	7-06-61	□		4640
		8-02-61	□		
		9-06-61	182.7	118.4	
		10-03-61	□		
		11-02-61	172.2	128.9	
		12-02-61	153.5	147.6	
		1-02-62	148.5	152.6	
		2-02-62	147.4	153.7	
		3-02-62	141.5	159.6	
		4-03-62	154.0	147.1	
		5-02-62	148.1	153.0	
		6-03-62	□		
		7-03-62	□		
		8-03-62	□		
		9-05-62	□		
		10-04-62	165.7	135.4	
		11-02-62	172.7	128.4	
		12-08-62	159.5	141.6	
		1-03-63	156.9	144.2	
		2-05-63	155.0	146.1	
		3-02-63	160.7	140.4	
		4-02-63	□		
		6-04-63	163.5	137.6	
29S/24E-14R01 M	290.0	10-08-62	98.0	192.0	5120
		2-04-63	96.0	194.0	
AVENAL-MCKITTRICK AREA			5-22.44		
22S/19E-18P02 M	255.0	1-08-63	152.8	102.2	5050
22S/19E-30A01 M	266.0	1-08-63	□		5050
		1-09-63	#		
23S/18E-29E02 M	560.0	7-17-62	133.4	426.6	5000
AVENAL-MCKITTRICK AREA			5-22.44		
23S/18E-29E02 M CONT.	560.0	8-07-62	133.5	426.5	5000
		9-18-62	133.6	426.4	
		10-20-62	133.7	426.3	
		11-23-62	133.8	426.2	
		12-20-62	134.0	426.0	
		1-22-63	133.5	426.5	
		2-19-63	133.3	426.7	
		3-19-63	133.2	426.8	
		4-20-63	133.2	426.8	
		5-21-63	133.4	426.6	
		6-18-63	133.7	426.3	
23S/19E-14R01 M	235.0	1-08-63	41.5	193.5	5050
23S/19E-26M01 M	267.0	1-08-63	□		5050
24S/18E-11D01 M	470.0	1-08-63	44.2	425.8	5050
24S/18E-30D01 M	699.0	1-09-63	193.8	505.2	5050
24S/18E-33N01 M	625.0	1-09-63	189.3	435.7	5050
25S/19E-15G01 M	422.0	1-09-63	105.1	316.9	5050
25S/19E-20Q02 M	480.0	7-17-62	128.5	351.5	5000
		8-07-62	127.8	352.2	
		9-18-62	128.9	351.1	
		10-20-62	129.0	351.0	
		11-23-62	129.6	350.4	
		12-20-62	127.9	352.1	
		1-22-63	128.7	351.3	
		2-19-63	129.4	350.6	
		3-18-63	129.1	350.9	
		4-20-63	129.0	351.0	
		5-21-63	129.1	350.9	
		6-18-63	128.6	351.4	
25S/20E-04C01 M	268.0	1-08-63	65.3	202.7	5050
26S/17E-13L02 M	910.0	1-08-63	161.9	748.1	5050
26S/18E-16H01 M	685.0	1-08-63	165.6	519.4	5050
26S/18E-19B02 M	875.0	1-09-63	168.2	706.8	5050
26S/18E-27F01 M	730.0	1-09-63	204.0	526.0	5050

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
AVENAL-MCKITTRICK AREA			5-22.44		
26S/19E-12L01 M	530.0	1-09-63	207.2	322.8	5050
27S/18E-15R01 M	1220.0	1-09-63	36.2*	1183.8	5050
TULARE LAKE-LOST HILLS AREA			5-22.45		
21S/20E-12M01 M	181.0	7-17-62	□		5000
		8-06-62	217.3	- 36.3	
		9-17-62	213.0	- 32.0	
		10-20-62	204.6	- 23.6	
		12-20-62	194.9	- 13.9	
		1-22-63	215.1	- 34.1	
		2-19-63	221.2	- 40.2	
		3-18-63	□		
		4-20-63	213.7	- 32.7	
		5-21-63	196.3	- 15.3	
		6-17-63	189.2	- 8.2	
21S/20E-27A01 M	178.0	7-17-62	□		5000
		8-06-62	□		
		9-17-62	223.7	- 45.7	
		10-20-62	215.5	- 37.5	
		12-20-62	□		
		1-22-63	□		
		2-19-63	□		
		3-18-63	220.0	- 42.0	
		4-20-63	231.4	- 53.4	
		5-21-63	211.8	- 33.8	
		6-17-63	198.3	- 20.3	
25S/21E-22H01 M	217.0	7-17-62	99.8	117.2	5000
		8-07-62	99.7	117.3	
		9-18-62	101.8	115.2	
		10-20-62	103.2	113.8	
		11-23-62	104.4	112.6	
		12-20-62	104.2	112.8	
		1-22-63	104.7	112.3	
		2-19-63	103.4	113.6	
		3-18-63	103.8	113.2	
		4-20-63	103.4	113.6	
		5-21-63	103.6	113.4	
		6-18-63	104.0	113.0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CORCORAN IRRIGATION DISTRICT			5-22.46		
21S/22E-10J03 M	204.0	2-27-62	63.3	140.7	5050
		11-05-62	65.5	138.5	
		12-04-62	64.7	139.3	
		12-28-62	65.9	138.1	
		1-25-63	70.0	134.0	
		3-04-63	64.4	139.6	
		3-28-63	70.4	133.6	
		4-29-63	65.5	138.5	
		5-31-63	64.3	139.7	
		6-28-63	66.8	137.2	
21S/22E-16Q01 M	196.5	7-02-62	15.8	180.7	5050
		8-03-62	16.3	180.2	
		8-30-62	16.7	179.8	
		9-27-62	15.9	180.6	
		11-05-62	15.4	181.1	
		12-04-62	16.0	180.5	
		12-28-62	15.9	180.6	
		1-25-63	15.6	180.9	
		2-14-63	16.2	180.3	
		3-04-63	16.7	179.8	
		3-28-63	16.6	179.9	
		4-29-63	15.9	180.6	
		5-31-63	16.2	180.3	
		6-28-63	16.8	179.7	
21S/22E-24K01 M	209.0	2-14-63	□		5050
21S/22E-27A01 M	196.0	2-28-62	42.0	154.0	5050
		11-05-62	47.0	149.0	
		12-04-62	44.9	151.1	
		12-28-62	45.2	150.8	
		1-25-63	44.9	151.1	
		3-04-63	45.1	150.9	
		3-28-63	□		
		4-29-63	44.2	151.8	
		5-31-63	43.7	152.3	
		6-28-63	45.3	150.7	
22S/22E-01B02 M	201.0	2-28-62	36.1	164.9	5050
		11-05-62	28.7	172.3	
		12-04-62	27.4	173.6	
		12-28-62	26.3	174.7	
		1-25-63	28.3	172.7	
		3-04-63	28.7	172.3	

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GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CORCORAN IRRIGATION DISTRICT			5-22.46		
22S/22E-01B02 M CONT.	201.0	3-28-63	27.0	174.0	5050
		4-29-63	27.3	173.7	
		5-31-63	25.5	175.5	
		6-28-63	25.4	175.6	
22S/22E-05L01 M	188.0	3-19-62	177.5	10.5	5050
		11-05-62	166.2	21.8	
		12-04-62	161.1	26.9	
		12-28-62	□		
		1-25-63	□		
		3-04-63	162.4	25.6	
		3-28-63	□		
		4-29-63	163.0	25.0	
		5-31-63	158.1	29.9	
		6-28-63	□		
22S/22E-08L01 M	188.0	3-19-62	181.2	6.8	5050
		11-05-62	223.9	- 35.9	
		12-04-62	213.6	- 25.6	
		12-28-62	□		
		1-25-63	□		
		3-04-63	167.7	20.3	
		3-28-63	166.1	21.9	
		4-29-63	163.3	24.7	
		5-31-63	156.8	31.2	
		6-28-63	152.0	36.0	
22S/22E-15C01 M	191.0	7-24-61	200.8*	- 9.8	5050
		8-30-61	209.3	- 18.3	
		9-27-61	210.1	- 19.1	
		11-01-61	196.6	- 5.6	
		11-29-61	193.1	- 2.1	
		12-28-61	180.2	10.8	
		1-26-62	177.8	13.2	
		2-28-62	181.4	9.6	
		3-30-62	168.7	22.3	
		4-27-62	163.7	27.3	
		5-31-62	154.2	36.8	
		7-02-62	153.3	37.7	
		8-03-62	156.9	34.1	
		8-30-62	161.5	29.5	
		9-27-62	162.3	28.7	
		11-05-62	158.1	32.9	
		12-04-62	153.1	37.9	
		12-28-62	150.5	40.5	
CORCORAN IRRIGATION DISTRICT			5-22.46		
22S/22E-15C01 M CONT.	191.0	1-25-63	154.0	37.0	5050
		3-04-63	152.7	38.3	
		3-28-63	149.7	41.3	
		4-29-63	146.3	44.7	
		5-31-63	141.2	49.8	
		6-28-63	137.1	53.9	
MENDOTA-HURON AREA			5-22.47		
13S/12E-05Q01 M	247.0	10-23-62	256.7	- 9.7	6001
		3-25-63	301.0	- 54.0	
13S/12E-22N01 M	280.0	10-30-62	171.6	108.4	6001
		3-25-63	192.8	87.2	
13S/13E-10R01 M	211.0	10-24-62	222.3	- 11.3	6001
		3-12-63	215.6	- 4.6	
13S/13E-12A01 M	183.0	10-24-62	5.6	177.4	6001
		3-13-63	5.0	178.0	
13S/13E-15R01 M	222.0	10-25-62	260.4	- 38.4	6001
		3-12-63	245.3	- 23.3	
13S/13E-33N01 M	282.5	10-23-62	@		6001
13S/14E-09J01 M	164.0	10-24-62	DRY		6001
		3-13-63	DRY		
13S/14E-32Q01 M	225.0	10-25-62	115.3	109.7	6001
		3-13-63	112.4	112.6	
14S/13E-15M01 M	321.0	12-22-62	□		5000
14S/14E-05H01 M	221.0	7-16-62	□		5000
		8-14-62	93.8	127.2	
		10-09-62	92.5	128.5	
		11-06-62	89.6	131.4	
		2-18-63	85.8	135.2	
		3-28-63	86.0	135.0	
		4-23-63	85.9	135.1	
		5-21-63	85.3	135.7	
		6-18-63	90.4	130.6	
14S/14E-28E02 M	248.0	7-16-62	62.8	185.2	5000

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MENDOTA-HURON AREA			5-22.47		
14S/14E-28E02 M CONT.	248.0	8-06-62	64.9	183.1	5000
		9-17-62	65.7	182.3	
		10-21-62	64.4	183.6	
		11-24-62	63.6	184.4	
		1-23-63	61.2	186.8	
		2-18-63	60.7	187.3	
		3-18-63	60.3	187.7	
		4-21-63	¤		
		5-20-63	61.0	187.0	
		6-17-63	60.2	187.8	
14S/15E-35N01 M	161.0	10-19-62	71.5	89.5	6001
		2-26-63	51.4	109.6	
15S/13E-26N01 M	473.0	12-21-62	¤		5000
15S/14E-07B02 M	282.0	7-16-62	233.6	48.4	5000
		8-06-62	¤		
		9-17-62	237.2	44.8	
		10-21-62	234.2	47.8	
		11-24-62	231.6	50.4	
		12-21-62	229.1	52.9	
		1-23-63	227.9	54.1	
		2-18-63	226.8	55.2	
		3-18-63	225.1	56.9	
		4-21-63	229.1	52.9	
		5-20-63	230.6	51.4	
		6-17-63	227.5	54.5	
15S/14E-15E01 M	236.0	7-18-61	57.5	178.5	5000
		8-21-61	65.1	170.9	
		9-18-61	64.9	171.1	
		10-16-61	60.5	175.5	
		11-13-61	¤		
		12-18-61	64.4	171.6	
		1-15-62	64.4	171.6	
		2-19-62	¤		
		3-12-62	64.9	171.1	
		4-09-62	63.7	172.3	
		5-14-62	63.9	172.1	
		6-18-62	63.8	172.2	
		7-16-62	64.6	171.4	
		8-06-62	62.2	173.8	
		9-17-62	62.4	173.6	
		10-21-62	62.1	173.9	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MENDOTA-HURON AREA			5-22.47		
15S/14E-15E01 M CONT.	236.0	11-24-62	62.6	173.4	5000
		1-23-63	62.7	173.3	
		2-18-63	63.2	172.8	
		3-18-63	63.8	172.2	
		4-21-63	60.5	175.5	
		5-20-63	61.0	175.0	
		6-17-63	60.0	176.0	
15S/14E-15E04 M	236.0	7-18-61	341.3	- 105.3	5000
		8-21-61	343.8	- 107.8	
		9-18-61	338.7	- 102.7	
		10-16-61	330.4	- 94.4	
		11-13-61	¤		
		12-18-61	311.4	- 75.4	
		1-15-62	306.3	- 70.3	
		2-19-62	¤		
		3-12-62	291.0	- 55.0	
		4-09-62	287.7	- 51.7	
		5-14-62	288.9	- 52.9	
		6-18-62	290.6	- 54.6	
		7-16-62	297.8	- 61.8	
		8-06-62	305.5	- 69.5	
		9-17-62	314.2	- 78.2	
		10-21-62	341.7	- 105.7	
		11-24-62	348.7	- 112.7	
		1-23-63	346.0	- 110.0	
		2-18-63	340.9	- 104.9	
		3-18-63	338.0	- 102.0	
		4-21-63	397.0	- 161.0	
		6-17-63	401.3	- 165.3	
15S/15E-22Q01 M	175.0	10-18-62	¤		6001
		2-21-63	95.6	79.4	
15S/16E-20R01 M	171.0	7-19-62	81.5	89.5	5000
		8-14-62	85.0	86.0	
		9-10-62	83.8	87.2	
		10-09-62	72.0	99.0	
		11-06-62	63.5	107.5	
		12-03-62	60.8	110.2	
		1-03-63	56.7	114.3	
		2-26-63	72.8	98.2	
		3-28-63	72.9	98.1	
		4-23-63	64.8	106.2	
		5-21-63	64.8	106.2	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MENDOTA-HURON AREA			5-22.47		
15S/16E-20R01 M CONT.	172.0	6-18-63	66.1	104.9	5000
15S/16E-28A04 M	170.0	7-18-61	162.9	7.1	5000
		8-21-61	167.1	2.9	
		9-18-61	167.5	2.5	
		10-16-61	166.7	3.3	
		11-13-61	166.5	3.5	
		12-18-61	162.1	7.9	
		1-15-62	159.1	10.9	
		2-19-62	157.7	12.3	
		3-12-62	158.6	11.4	
		4-09-62	159.3	10.7	
		5-14-62	160.6	9.4	
		6-18-62	162.1	7.9	
		7-16-62	165.9	4.1	
		8-06-62	168.1	1.9	
		9-17-62	171.3	- 1.3	
		10-21-62	170.5	- 0.5	
		11-24-62	168.6	1.4	
		12-21-62	166.8	3.2	
		1-23-63	163.9	6.1	
		2-18-63	161.8	8.2	
		3-18-63	164.1	5.9	
		4-21-63	176.7	- 6.7	
		5-20-63	180.7	- 10.7	
		6-17-63	166.2	3.8	
15S/16E-34E01 M	175.0	7-19-62	189.7	- 14.7	5000
		8-14-62	194.0	- 19.0	
		9-10-62	196.3	- 21.3	
		10-09-62	193.5	- 18.5	
		11-06-62	192.6	- 17.6	
		12-03-62	190.4	- 15.4	
		1-03-63	186.5	- 11.5	
		2-26-63	185.6	- 10.6	
		3-28-63	189.1	- 14.1	
		4-23-63	189.3	- 14.3	
		5-21-63	189.3	- 14.3	
		6-18-63	188.1	- 13.1	
16S/15E-02N02 M	219.0	10-18-62	94.5	124.5	6001
		2-20-63	88.5*	130.5	
16S/16E-10N01 M	191.0	10-15-62	125.8	65.2	6001
		2-07-63	121.3	69.7	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MENDOTA-HURON AREA			5-22.47		
16S/16E-18N01 M	233.0	10-15-62	87.0	146.0	6001
		2-20-63	83.3	149.7	
16S/16E-28M01 M	235.0	10-18-62	DRY		6001
		2-20-63	@		
17S/14E-13R01 M	457.0	12-19-62	¤		5000
17S/16E-02E01 M	218.0	10-18-62	211.4	6.6	5050
		2-07-63	195.8	22.2	
17S/16E-24R01 M	232.5	7-16-62	193.3	39.2	5000
		8-06-62	193.4	39.1	
		9-17-62	192.1	40.4	
		10-21-62	185.7	46.8	
		11-23-62	¤		
		12-21-62	169.7	62.8	
		1-23-63	170.6	61.9	
		2-18-63	168.8	63.7	
		3-18-63	165.9	66.6	
		4-21-63	177.7	54.8	
		5-20-63	169.1	63.4	
		6-17-63	173.1	59.4	
17S/16E-30A02 M	290.0	7-18-61	67.2	222.8	5000
		8-21-61	67.0	223.0	
		9-18-61	67.8	222.2	
		10-16-61	64.4	225.6	
		11-13-61	67.6	222.4	
		12-18-61	67.1	222.9	
		1-15-62	66.7	223.3	
		2-19-62	¤		
		3-12-62	66.9	223.1	
		4-09-62	66.9	223.1	
		5-15-62	66.9	223.1	
		6-18-62	68.0	222.0	
		7-16-62	66.2	223.8	
		8-06-62	67.4	222.6	
		9-17-62	64.1	225.9	
		10-21-62	66.7	223.3	
		11-23-62	66.4	223.6	
		12-20-62	66.4	223.6	
		1-23-63	66.3	223.7	
		2-18-63	66.1	223.9	
		3-18-63	65.7	224.3	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MENDOTA-HURON AREA			5-22.47		
17S/16E-30A02 M CONT.	290.0	4-21-63	66.1	223.9	5000
		6-17-63	72.9	217.1	
17S/16E-30A04 M	290.0	7-18-61	435.8	-145.8	5000
		8-21-61	453.9	-163.9	
		9-18-61	463.1	-173.1	
		10-16-61	441.3	-151.3	
		11-13-61	440.5	-150.5	
		12-18-61	372.5*	-82.5	
		1-15-62	364.4	-74.4	
		2-19-62	¤		
		3-12-62	367.2	-77.2	
		4-09-62	363.7	-73.7	
		5-15-62	385.2	-95.2	
		6-18-62	403.1	-113.1	
		7-16-62	413.3	-123.3	
		8-06-62	431.6	-141.6	
		9-17-62	433.5	-143.5	
		10-21-62	430.2	-140.2	
		11-23-62	423.8	-133.8	
		12-21-62	418.1	-128.1	
		1-23-63	413.3	-123.3	
		2-18-63	406.4	-116.4	
		3-18-63	404.1	-114.1	
		4-21-63	375.5	-85.5	
		5-20-63	363.4	-73.4	
		6-17-63	366.2	-76.2	
17S/17E-21N02 M	226.0	7-18-62	306.6	-80.6	5000
		8-03-62	308.5	-82.5	
		8-18-62	303.8	-77.8	
		9-04-62	304.4	-78.4	
		10-02-62	284.5	-58.5	
		10-23-62	290.0	-64.0	
		11-11-62	279.5	-53.5	
		12-12-62	263.0	-37.0	
		1-01-63	251.2	-25.2	
		2-08-63	292.0	-66.0	
		2-26-63	269.0	-43.0	
		3-03-63	274.6	-48.6	
		3-17-63	276.9	-50.9	
		4-10-63	288.1	-62.1	
		5-16-63	269.4	-43.4	
		6-01-63	285.3	-59.3	
		6-11-63	280.1	-54.1	
MENDOTA-HURON AREA			5-22.47		
17S/17E-21N02 M CONT.	226.0	6-30-63	304.0	-78.0	5000
18S/15E-02N01 M	429.0	7-18-61	736.7	-307.7	5000
		8-21-61	757.7	-328.7	
		9-18-61	723.5	-294.5	
		10-16-61	703.3	-274.3	
		11-13-61	701.6	-272.6	
		12-18-61	691.5	-262.5	
		1-15-62	690.5	-261.5	
		2-19-62	¤		
		3-12-62	693.2	-264.2	
		4-09-62	725.9	-296.9	
		5-15-62	819.6	-390.6	
		6-18-62	834.0	-405.0	
		7-16-62	850.8	-421.8	
		8-06-62	858.5	-429.5	
		9-17-62	818.3	-389.3	
		10-21-62	791.1	-362.1	
		11-23-62	792.9	-363.9	
		12-20-62	756.4	-327.4	
		2-18-63	740.5	-311.5	
		3-18-63	738.3	-309.3	
		4-21-63	743.9	-314.9	
		5-20-63	725.3	-296.3	
		6-17-63	734.3	-305.3	
18S/17E-12N01 M	253.0	12-19-62	322.1	-69.1	5000
19S/17E-35N01 M	367.0	7-19-62	510.0	-143.0	5000
		8-15-62	516.4	-149.4	
		9-12-62	490.4	-123.4	
		10-09-62	464.8	-97.8	
		11-07-62	466.6	-99.6	
		12-04-62	461.2	-94.2	
		1-04-63	478.0	-111.0	
		2-27-63	509.1	-142.1	
		3-28-63	496.8	-129.8	
		4-23-63	495.3	-128.3	
		5-21-63	495.3	-128.3	
		6-18-63	493.0*	-126.0	
19S/18E-15M01 M	274.0	12-20-62	¤		5000
19S/18E-27M01 M	281.0	7-16-62	354.2	-73.2	5000
		8-06-62	359.3	-78.3	

TABLE C-1

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MENDOTA-HURON AREA			5-22.47		
19S/18E-27M01 M CONT.	281.0	9-17-62	354.9	- 73.9	5000
		10-20-62	351.5	- 70.5	
		11-24-62	349.0	- 68.0	
		12-21-62	358.8	- 77.8	
		1-22-63	361.7	- 80.7	
		2-19-63	364.2	- 83.2	
		3-18-63	366.3	- 85.3	
		4-21-63	369.2	- 88.2	
		5-21-63	351.4	- 70.4	
		6-17-63	345.2	- 64.2	
0S/15E-25D01 M	619.0	1-08-63	189.3	429.7	5050
)S/15E-32A01 M	675.0	8-14-62	211.9	463.1	5000
		10-10-62	213.3	461.7	
		11-06-62	213.6	461.4	
		2-27-63	214.8	460.2	
		3-28-63	□		
		4-24-63	215.8	459.2	
		5-22-63	216.2	458.8	
		6-18-63	216.6	458.4	
20S/18E-11N01 M	277.0	12-21-62	429.0	- 152.0	5000
20S/18E-11Q01 M	270.0	8-16-62	449.5	- 179.5	5000
		9-12-62	430.5	- 160.5	
		10-10-62	424.7	- 154.7	
		11-07-62	422.7	- 152.7	
		2-27-63	436.5	- 166.5	
		3-28-63	435.0	- 165.0	
		4-24-63	421.3	- 151.3	
		5-22-63	406.0	- 136.0	
		6-18-63	418.0	- 148.0	
20S/18E-36D01 M	260.0	7-17-62	287.6	- 27.6	5000
		8-06-62	279.0	- 19.0	
		9-18-62	289.4	- 29.4	
		10-20-62	288.1	- 28.1	
		11-24-62	284.8	- 24.8	
		12-20-62	278.7	- 18.7	
		1-22-63	278.7	- 18.7	
		2-19-63	281.0	- 21.0	
		3-18-63	281.6	- 21.6	
		4-20-63	288.6	- 28.6	
		5-21-63	281.3	- 21.3	
MENDOTA-HURON AREA			5-22.47		
20S/18E-36D01 M	260.0	6-17-63	291.1	- 31.1	5000
21S/15E-01E01 M	623.0	1-08-63	188.2	434.8	5050
21S/16E-02N01 M	570.0	1-08-63	162.0	408.0	5050
21S/16E-07N01 M	634.0	1-08-63	□		5050
21S/16E-35D01 M	682.0	1-08-63	□		5050
21S/17E-06N01 M	526.0	1-08-63	125.9	400.1	5050
21S/18E-28M02 M	360.0	7-17-62	322.6	37.4	5000
		8-07-62	324.2	35.8	
		9-18-62	325.0	35.0	
		10-20-62	323.0	37.0	
		11-24-62	□		
		12-20-62	308.9	51.1	
		1-22-63	317.6	42.4	
		2-19-63	320.7	39.3	
		3-18-63	321.6	38.4	
		4-20-63	324.0	36.0	
		5-21-63	324.2	35.8	
		6-17-63	323.6	36.4	
22S/16E-12F01 M	787.0	1-08-63	303.8	483.2	5050
POSO SOIL CONSERVATION DISTRICT			5-22.48		
10S/13E-06R01 M	110.0	7-21-61	9.2	100.8	5529
		8-18-61	□		
		9-12-61	5.9	104.1	
		10-16-61	7.3	102.7	
		11-14-61	8.2	101.8	
		12-13-61	9.0	101.0	
		1-12-62	9.2	100.8	
		2-15-62	7.5	102.5	
		3-17-62	5.8	104.2	
		4-21-62	5.6	104.4	
		5-19-62	6.3	103.7	
		6-19-62	□		
		7-10-62	7.3	102.7	
		8-15-62	18.2	91.8	
		9-14-62	6.6	103.4	
		10-23-62	7.4	102.6	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
POSO SOIL CONSERVATION DISTRICT			5-22.48		
10S/13E-06R01 M CONT.	110.0	11-25-62	8.9	101.1	5529
		12-26-62	9.4	100.6	
		1-22-63	9.7	100.3	
		2-27-63	6.4	103.6	
		3-19-63	5.6	104.4	
		4-19-63	5.5	104.5	
		5-20-63	5.8	104.2	
		6-20-63	6.5	103.5	
11S/13E-05Q01 M	117.0	7-20-61	□		5529
		8-18-61	□		
		9-12-61	□		
		10-16-61	7.2	109.8	
		11-14-61	6.9	110.1	
		12-13-61	6.9	110.1	
		1-12-62	7.1	109.9	
		2-15-62	6.8	110.2	
		3-17-62	6.1	110.9	
		4-21-62	□		
		5-19-62	□		
		6-19-62	□		
		7-10-62	□		
		8-15-62	7.3	109.7	
		9-14-62	□		
		10-23-62	6.8	110.2	
		11-25-62	7.3	109.7	
		12-26-62	7.4	109.6	
		1-22-63	7.4	109.6	
		2-27-63	6.4	110.6	
		3-19-63	5.6	111.4	
		4-19-63	6.3	110.7	
11S/13E-26A01 M	128.0	7-20-61	□		5529
		8-18-61	20.6	107.4	
		9-12-61	17.4	110.6	
		10-16-61	14.9	113.1	
		11-14-61	10.6	117.4	
		12-13-61	10.5	117.5	
		1-12-62	10.5	117.5	
		2-15-62	9.7	118.3	
		3-17-62	9.3	118.7	
		4-21-62	16.5	111.5	
		5-19-62	14.2	113.8	
		6-19-62	17.5	110.5	
		7-10-62	17.6	110.4	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
POSO SOIL CONSERVATION DISTRICT			5-22.48		
11S/13E-26A01 M CONT.	128.0	8-15-62	16.1	111.9	5529
		9-14-62	17.8	110.2	
		10-23-62	10.6	117.4	
		11-25-62	10.6	117.4	
		12-26-62	10.5	117.5	
		1-22-63	10.3	117.7	
		2-27-63	9.5	118.5	
		3-19-63	8.9	119.1	
		4-19-63	7.7	120.3	
		5-20-63	8.3	119.7	
		6-20-63	11.4	116.6	
11S/13E-33L01 M	126.0	7-20-61	10.2	115.8	5529
		8-18-61	11.4	114.6	
		9-12-61	12.2	113.8	
		10-16-61	9.5	116.5	
		11-14-61	9.5	116.5	
		12-13-61	9.2	116.8	
		1-12-62	9.4	116.6	
		2-15-62	9.0	117.0	
		3-17-62	8.6	117.4	
		4-21-62	8.5	117.5	
		5-19-62	9.4	116.6	
		6-19-62	10.2	115.8	
		7-10-62	10.5	115.5	
		8-15-62			
		9-14-62	9.4	116.6	
		10-23-62	9.2	116.8	
		11-25-62	9.7	116.3	
		12-26-62	9.5	116.5	
		1-21-63	9.8	116.2	
		2-27-63	9.5	116.5	
		3-19-63	9.2	116.8	
		4-19-63	8.0	118.0	
		5-20-63	8.5	117.5	
		6-21-63	8.7	117.3	
12S/13E-13J01 M	140.0	7-20-61	□		5529
		8-18-61	□		
		9-12-61	14.7	125.3	
		10-16-61	13.0	127.0	
		11-14-61	10.4	129.6	
		12-13-61	10.3	129.7	
		1-12-62	10.3	129.7	
		2-15-62	9.9	130.1	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
POSO SOIL CONSERVATION DISTRICT			5-22.48		
12S/13E-13J01 M CONT.	140.0	3-17-62	9.8	130.2	5529
		4-21-62	13.5	126.5	
		5-19-62	14.0	126.0	
		6-19-62	15.9	124.1	
		7-10-62	16.2	123.8	
		8-15-62	17.5	122.5	
		9-14-62	16.9	123.1	
		10-23-62	12.0	128.0	
		11-25-62	11.6	128.4	
		12-26-62	11.7	128.3	
		1-21-63	11.3	128.7	
		2-27-63	11.0	129.0	
		3-19-63	10.8	129.2	
		4-19-63	9.9	130.1	
		5-20-63	8.5	131.5	
		6-21-63	8.9	131.1	
TERRA BELLA IRRIGATION DISTRICT			5-22.50		
22S/27E-25J03 M	532.0	9-15-61	118.3	413.7	6001
		10-26-61	118.8	413.2	
		11-30-61	111.0	421.0	
		12-20-61	105.5	426.5	
		1-25-62	106.3	425.7	
		2-27-62	104.8	427.2	
		3-28-62	103.7	428.3	
		4-24-62	116.9	415.1	
		5-22-62	120.8	411.2	
		6-20-62	132.7	399.3	
		7-23-62	131.1	400.9	
		8-22-62	143.4	388.6	
		9-18-62	143.0	389.0	
		10-15-62	125.4	406.6	
		11-20-62	116.6	415.4	
		12-18-62	114.1	417.9	
		1-23-63	111.5	420.5	
		2-26-63	123.7	408.3	
		3-21-63	123.2	408.8	
		4-25-63	106.8	425.2	
		5-20-63	115.6	416.4	
		6-27-63	141.3	390.7	
22S/27E-36N01 M	513.0	7-23-62	290.8	222.2	5000
		8-22-62	312.8	200.2	
		9-18-62	311.6	201.4	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
TERRA BELLA IRRIGATION DISTRICT			5-22.50		
22S/27E-36N01 M CONT.	513.0	10-15-62	298.6	214.4	5000
		11-20-62	280.6	232.4	
		12-18-62	267.6	245.4	
		1-23-63	259.0	254.0	
		2-26-63	257.0	256.0	
		3-21-63	260.4	252.6	
		4-25-63	246.3	266.7	
		5-20-63	256.7	256.3	
		6-27-63	267.5	245.5	
23S/27E-10H01 M	518.0	10-10-62	250.0	268.0	6001
		2-01-63	230.0	288.0	
MERCED BOTTOMS			5-22.54		
7S/10E-23K01 M	80.0	1-02-62	18.3	61.7	5050
		2-02-62	17.1	62.9	
		3-05-62	9.1	70.9	
		4-05-62	9.0	71.0	
		5-02-62	12.2	67.8	
		6-07-62	12.1	67.9	
		7-02-62	12.6	67.4	
		8-02-62	10.1	69.9	
		9-06-62	19.4	60.6	
		10-03-62	27.1	52.9	
		11-01-62	20.4	59.6	
		12-05-62	19.2	60.8	
		1-07-63	13.2	66.8	
		2-15-63	8.4	71.6	
		3-06-63	6.6	73.4	
		4-02-63	6.4	73.6	
		5-03-63	4.4	75.6	
		6-04-63	5.4	74.6	
7S/10E-23K02 M	80.0	1-02-62	10.1	69.9	5050
		2-02-62	10.1	69.9	
		3-05-62	6.2	73.8	
		4-05-62	7.8	72.2	
		5-02-62	8.4	71.6	
		6-07-62	4.0	76.0	
		7-02-62	4.5	75.5	
		8-02-62	6.0	74.0	
		9-06-62	4.9	75.1	
		10-03-62	5.2	74.8	
		11-01-62	4.4	75.6	

TABLE C-I

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
MERCED BOTTOMS			5-22.54		
7S/10E-23K02 M CONT.	80.0	12-05-62	7.1	72.9	5050
		1-07-63	4.6	75.4	
		2-15-63	1.9	78.1	
		3-06-63	2.7	77.3	
		4-02-63	2.6	77.4	
		5-03-63	3.0	77.0	
		6-04-63	3.4	76.6	
9S/14E-01B01 M	180.0	1-02-62	47.0	133.0	5050
		2-02-62	44.6	135.4	
		3-05-62	42.1	137.9	
		4-06-62	41.6	138.4	
		5-02-62	42.9	137.1	
		6-07-62	60.1	119.9	
		7-02-62	61.0	119.0	
		8-02-62	57.3	122.7	
		9-06-62	90.8	89.2	
		10-03-62	86.1	93.9	
		11-01-62	59.2	120.8	
		12-05-62	61.4	118.6	
		1-07-63	48.8	131.2	
		2-10-63	45.1	134.9	
		3-05-63	44.2	135.8	
		4-02-63	49.8	130.2	
		5-03-63	49.9	130.1	
		6-04-63	52.4	127.6	
9S/14E-01B02 M	180.0	1-02-62	45.4	134.6	5050
		2-02-62	43.4	136.6	
		3-05-62	41.2	138.8	
		4-06-62	41.0	139.0	
		5-02-62	42.3	137.7	
		6-07-62	58.0	122.0	
		7-02-62	58.8	121.2	
		8-02-62	44.5	135.5	
		9-06-62	84.8	95.2	
		10-03-62	71.2	108.8	
		11-01-62	56.6	123.4	
		12-05-62	51.2	128.8	
		1-07-63	47.5	132.5	
		2-10-63	44.4	135.6	
		3-05-63	43.5	136.5	
		4-02-63	49.2	130.8	
		5-03-63	48.4	131.6	
		6-04-63	51.4	128.6	
MERCED BOTTOMS			5-22.54		
9S/14E-01B03 M	180.0	1-02-62	31.3	148.7	5050
		2-02-62	31.3	148.7	
		3-05-62	28.9	151.1	
		4-06-62	29.1	150.9	
		5-02-62	29.7	150.3	
		6-07-62	30.7	149.3	
		7-02-62	30.8	149.2	
		8-02-62	30.7	149.3	
		9-06-62	31.9	148.1	
		10-03-62	32.4	147.6	
		11-01-62	32.4	147.6	
		12-05-62	32.0	148.0	
		1-07-63	32.9	147.1	
		2-10-63	32.6	147.4	
		3-05-63	32.2	147.8	
		4-02-63	32.6	147.4	
		5-03-63	32.4	147.6	
		6-04-63	32.6	147.4	

APPENDIX D

SURFACE WATER QUALITY

TABLE OF CONTENTS

LIST OF TABLES

LIST OF PLATES

(Bound at end of volume)

INTRODUCTION

This appendix contains data pertaining to the quality of surface waters collected during the 1963 water year (October 1, 1962 to September 30, 1963). The data are presented as tables and graphs and represent the observed physical, chemical, and bacteriological characteristics of the waters collected at the surface water quality monitoring stations.

The stations are sampled periodically (monthly, quarterly, or semiannually), depending on past records, need, and the type of data required for each station. Samples collected and the field data obtained at the stations are as follows:

1. Partial mineral analysis - ½ gallon
2. Bacteriological analyses (coliform) - 2 samples in 4 oz., sterilized bottles
3. Dissolved oxygen - D.O.
4. pH
5. Temperature
6. Gage Height
7. Time
8. Visual observation of water conditions

In May and September, the partial mineral analysis is replaced by a complete mineral analysis and the following are added to the list above:

1. Radiological analysis
2. Phosphate, arsenic and detergents (ABS)
3. Spectrographic analysis of heavy metals (for ten selected stations)

Continuous conductivity recorders are installed at six of the surface water quality monitoring stations, as indicated on Plate D-1. The recorders measure specific electrical conductance, a characteristic of water which provides an approximation of the quantity of minerals in solution.

EXPLANATION OF TABLES

An alphabetical listing of all stations in the surface water monitoring program is found in Table D-1 along with information concerning station number and location, period of record, frequency of sampling, and agency responsible for collection of samples.

Results of mineral analyses can be found in Tables D-2 to D-31, where mineral concentrations, dissolved oxygen, and ABS are expressed in parts per million (ppm). Discharges are expressed as cubic feet per second (cfs) and bacteriological determinations are expressed as the most probable number (MPN) of coliform bacteria per milliliter of sample.

Results of spectrographic analyses for heavy metals, found in Table D-32, are expressed as micrograms per liter or parts per billion.

Table D-33 contains results of radiological analyses, expressed as picocuries per liter (pc/l).

EXPLANATION OF PLATES

Locations of surface water quality stations and recorder sites are found on Plate D-1.

Plate D-2 presents, in graphical form, data obtained from electrical conductivity recorders in terms of mean weekly values of electrical conductivity (EC x 10^6 micromhos) plotted against time (week).

EXPLANATION OF TERMS AND ABBREVIATIONS

Cubic foot per second (cfs) - the rate of discharge of water where a cubic foot of water passes a given point in one second.

Dissolved oxygen (DO) - the amount of free oxygen contained in water. It is one of the most important indicators of the condition of a water supply.

EXPLANATION OF TERMS AND ABBREVIATIONS (Continued)

Total dissolved solids (TDS) - represents the dissolved mineral constituents in water.

Specific conductance - a measure of the capacity of water to conduct a current of electricity.

Coliform - a group of organisms, whose presence is a satisfactory bacteriological indicator of contamination or pollution in water.

Most probable number (MPN) - an index of the number of coliform bacteria which more probably than any other number would give the results shown by laboratory tests.

Hardness - a characteristic of water that determines its usefulness and economic value. It is mainly caused by compounds of magnesium and calcium and is usually recognized by the increased quantity of soap required to produce lather.

TABLE D-1
SAMPLING STATION DATA AND INDEX
FOR
SURFACE WATER

Station	Station Number	Location[a]	Period of Record[b]	Frequency of Sampling[c]	Sampled by[d]	Analysis on page
Big Creek above Pine Flat Dam	33d	12S/25E-4	July 1960	M	USCE	D-8, D-39
Chowchilla River near Raymond	114	8S/18E-1	January 1962	S	DWR	D-9, D-39
Delta-Mendota Canal near Mendota	92	13S/15E-19	July 1952	M	DWR	D-10, D-39
Delta-Mendota Canal near Tracy	93	1S/4E-30	July 1952	M	DWR	D-11, D-39
Fresno River near Daulton	113	9S/19E-34	January 1958	S	DWR	D-12, D-39
Kaweah River below Terminus Dam	35	17S/28E-33	April 1951	M	USCE	D-13, D-39
Kern River near Bakersfield	36	29S/28E-9	April 1951	M	DWR	D-14, D-39
Kern River below Isabella Dam	36a	26S/33E-30	September 1955	Q	USCE	D-15, D-39
Kern River below Kernville	36b	25S/33E-15	September 1955	Q	USCE	D-16, D-39
Kings River below North Fork	33c	12S/26E-21	September 1955	Q	USCE	D-17, D-39
Kings River below Peoples Weir	34	17S/22E-1	April 1951	M	DWR	D-18, D-39
Kings River below Pine Flat Dam	33b	13S/24E-2	September 1955	Q	USCE	D-19, D-39
Merced River below Exchequer Dam	32a	4S/15E-13	April 1959	Q	DWR	D-20, D-39
Merced River near Stevinson	32	6S/9E-36	April 1951	M	DWR	D-21, D-39
Salt Slough at San Luis Ranch	24c	9S/11E-7	November 1958	M	DWR	D-22, D-40
San Joaquin River at Crows Land Bridge	26b	6S/9E-7	January 1962	M	DWR	D-23, D-40
San Joaquin River at Fremont Ford Bridge	25c	7S/9E-24	July 1955	M	DWR	D-24, D-40
San Joaquin River at Friant Dam	24	11S/21E-7	April 1951	Q	DWR	D-25, D-40
San Joaquin River near Grayson	26	4S/7E-24	April 1959	M	SF	D-26, D-40
San Joaquin River at Hills Ferry Bridge	25b	7S/9E-3	October 1958[e]	M	DWR	D-27, D-40
San Joaquin River at Maze Road Bridge	26a	3S/7E-33	April 1951	M	SF	D-28, D-40
San Joaquin River near Mendota	25	13S/15E-7	April 1951	M	DWR	D-29, D-40
San Joaquin River at Patterson Bridge	27a	5S/8E-15	January 1962	M	DWR	D-30, D-40
San Joaquin River near Vernalis	27	3S/6E-13	April 1951	M	DWR	D-31, D-40
Stanislaus River near Mouth	29	3S/7E-17	April 1951	M	DWR	D-32, D-40
Stanislaus River below Tulloch Dam	29a	1S/12E-1	July 1956	Q	DWR	D-33, D-40
Tule River below Success Dam	91	17S/27E-26	July 1952	M	USCE	D-34, D-41
Tuolumne River below Don Pedro Dam	31a	3S/14E-20	April 1951	Q	SF	D-35, D-41
Tuolumne River at Hickman-Waterford Bridge	30	3S/11E-34	April 1951	M	SF	D-36, D-41
Tuolumne River at Tuolumne City	31	4S/8E-12	April 1951	M	SF	D-37, D-41

a. Locations are in reference to Mt. Diablo Base and Meridian
b. Beginning of record
c. M - Monthly, B - Bimonthly, Q - Quarterly, S - Semiannually
d. DWR - Department of Water Resources
USCE - United States Corps of Engineers
SF - City & County of San Francisco
e. Discontinued as of July 1, 1963

TABLE D-2

ANALYSES OF SURFACE WATER

BIG CREEK ABOVE PINE FLAT DAM (STA. NO. 33d)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 62. Maximum 7000. Minimum 2.3	USGS
10/1 1030	-	70	10.4	116	158	7.2	c / 0.92		14 / 0.61		0.0 / 0.00	55 / 0.90		20 / 0.56			0.0			135[e]	40	40	1	10		
11/5 1130	1	52	10.2	93	138	7.6	c / 0.78		12 / 0.52		0.0 / 0.00	53 / 0.87		15 / 0.42			0.1			118[e]	40	39	0	1		
12/3 1030	-	48	10.7	93	135	7.3	c / 0.76		11 / 0.48		0.0 / 0.00	52 / 0.85		13 / 0.37			0.0			115[e]	39	38	0	1		
1963 --												No sample taken - dry														
2/11 1200	113	52	10.0	91	77	6.7	c / 0.49		5.0 / 0.22		0.0 / 0.00	34 / 0.56		2.7 / 0.08			0.1			66[e]	31	24	0	20		
3/4 1230	28	46	10.0	84	94	7.2	c / 0.57		6.7 / 0.29		0.0 / 0.00	44 / 0.72		4.5 / 0.13			0.0			80[e]	34	28	0	2		
4/1 1130	68	48	10.2	89	78	7.2	c / 0.51		5.5 / 0.24		0.0 / 0.00	37 / 0.61		1.6 / 0.05			0.0			67[e]	32	26	0	15		
5/6 1205	109	62	10.4	107	70	7.4	7.8 / 0.39	0.9 / 0.07	5.0 / 0.22	1.5 / 0.04	0.0 / 0.00	36 / 0.59	3.0 / 0.06	2.4 / 0.07	0.0 / 0.00	0.0 / 0.00	0.0	25	PO_4 0.00	[illegible][f]	31	23	0	3		
6/4 1120	-	61	10.6	108	84	7.2	c / 0.53		6.1 / 0.27		0.0 / 0.00	36 / 0.59		4.2 / 0.12			0.0			72[e]	34	27	0	2		
7/8 1300	30	64	10.1	107	26	6.7	c / 0.19		1.2 / 0.05		0.0 / 0.00	43 / 0.70		1.0 / 0.03			0.0			22[e]	21	10	0	2		
8/12 1100	-	78	10.0	122	107	7.3	c / 0.54		8.6 / 0.37		0.0 / 0.00	12 / 0.20		7.0 / 0.20			0.0			91[e]	41	27	0	2		
9/5 1120	4	78	10.1	123	119	7.3	11 c / 0.55	1.9 / 0.16	9.2 / 0.40	2.4 / 0.06	0.0 / 0.00	52 / 0.85	3.0 / 0.06	9.0 / 0.25	0.1 / 0.00	0.3 / 0.02	0.1	29	PO_4 0.00, As 0.00, ABS 0.0	100[f]	34	36	0	2		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of

TABLE D-3

ANALYSES OF SURFACE WATER

CHOWCHILLA RIVER NEAR RAYMOND (STA. NO. 114)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Per cent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																									Median 6.2 Maximum 1300 Minimum 0.23	USGS
--												No sample taken - dry														
11/8 1345	No Flow	65	10.1	107	640	8.0	[c] / 3.40		54 / 2.35		0.0 / 0.00	119 / 1.95		136 / 3.84			0.0			395[e]	41	170	72	1		
12/6 1235	2	50	10.8	96	628	8.0	[c] / 3.27		56 / 2.44		0.0 / 0.00	112 / 1.84		137 / 3.86			0.0			387[e]	43	163	71	1		
1963																										
1/9 0915	21.6	39	13.1	99	538	8.1	[c] / 2.80		46 / 2.00		0.0 / 0.00	116 / 1.90		108 / 3.05			0.0			331[e]	42	140	45	2		
2/7 1405	107	47	9.7	82	201	7.8	[c] / 1.16		17 / 0.74		0.0 / 0.00	71 / 1.16		25 / 0.71			0.2			126[e]	39	58	0	6		
3/6 1040	34	-	10.9	-	206	8.2	[c] / 1.22		17 / 0.74		0.0 / 0.00	86 / 1.41		22 / 0.62			0.0			127[e]	38	61	0	3		
4/3 1520	349	63	9.5	98	147	8.0	[c] / 0.97		11 / 0.48		0.0 / 0.00	69 / 1.13		8.8 / 0.25			0.0			91[e]	33	48	0	2		
5/9 1035	359	61	9.0	91	118	7.5	11 / 0.55	2.8 / 0.23	8.8 / 0.38	1.7 / 0.04	0.0 / 0.00	60 / 0.98	3.0 / 0.06	5.0 / 0.14	2.2 / 0.04	0.1 / 0.01	0.0	29	PO_4 0.20	104[f]	32	39	0	150		
6/3 1015	51	73	7.9	91	158	8.2	[c] / 0.99		13 / 0.57		0.0 / 0.00	77 / 1.26		12 / 0.34			0.0			97[e]	37	49	0	2		
--												- Not scheduled[j] -														
--												- Not scheduled[j] -														
--												- Not scheduled[j] -														

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

j Effective July 1963, this station sampled only in May and October.

TABLE D-4

ANALYSES OF SURFACE WATER

DELTA-MENDOTA CANAL NEAR MENDOTA (STA. NO. 92)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 23.	USGS
10/5 0930	--	68	8.5	94	462	7.7	2.12[c]		54 / 2.35		0.0 / 0.00	102 / 1.67		72 / 2.03			0.1			260[e]	53	106	22	20	Maximum 2400.	
11/9 1130	--	62	9.6	98	885	8.2	3.88[c]		106 / 4.61		0.0 / 0.00	146 / 2.39		146 / 4.12			--			500[e]	54	194	74	25	Minimum .05	
12/7 1200	--	53	10.0	92	850	8.1	3.78[c]		102 / 4.44		0.0 / 0.00	144 / 2.36		13[illegible] / 3.[illegible]			0.5			480[e]	54	189	71	5		
1963																										
1/10 0900	--	46	14.5	122	808	8.2	3.56[c]		94 / 4.09		0.0 / 0.00	134 / 2.20		135 / 3.81			0.3			456[e]	53	178	68	20		
2/8 1030	--	57	11.4	110	988	8.0	4.16[c]		115 / 5.00		0.0 / 0.00	145 / 2.38		164 / 4.63			0.8			557[e]	55	208	89	15		
3/8 1330	--	58	9.4	92	496	7.6	2.07[c]		54 / 2.35		0.0 / 0.00	87 / 1.43		66 / 1.86			0.4			280[e]	53	103	32	35		
4/2 0900	--	58	10.6	104	716	8.0	3.40[c]		87 / 3.57		0.0 / 0.00	102 / 1.67		103 / 2.91			0.4			404[e]	51	170	86	40		
5/10 0830	--	66	9.1	97	303	7.3	18 / 0.90	8.0 / 0.66	31 / 1.35	2.0 / 0.05	0.0 / 0.00	68 / 1.11	34 / 0.71	36 / 1.02	1.3 / 0.02	0.2 / 0.01	0.0		PO_4 = 0.30 ABS = 0.0	185[g]	46	78	22	70		
6/3 1220	--	68	8.0	88	173	7.9	0.90[c]		16 / 0.70		0.0 / 0.00	44 / 0.72		18 / 0.51			0.0			97[e]	44	45	9	50		
7/9 0905	--	74	7.5	87	340	7.7	1.66[c]		34 / 1.48		0.0 / 0.00	72 / 1.18		24 / 0.68			0.1			184[e]	47	83	24	60		
8/8 1345	--	78	7.0	84	297	8.2	1.86[c]		28 / 1.22		0.0 / 0.00	87 / 1.43		32 / 0.90			0.1			168[e]	40	93	22	65		
9/10 0710	--	73	6.9	79	461	8.0	23 / 1.15	14 / 1.15	44 / 1.91	2.2 / 0.06	0.0 / 0.00	107 / 1.75	41 / 0.85	62 / 1.75	4.6 / 0.07	0.1 / 0.01	0.1		As = 0.01 PO_4 = 0.45 ABS = 0.0	273[g]	45	115	27	25		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of

TABLE D-5
ANALYSES OF SURFACE WATER

DELTA-MENDOTA CANAL NEAR TRACY (STA. NO. 93)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO3)	Bicarbonate (HCO3)	Sulfate (SO4)	Chloride (Cl)	Nitrate (NO3)	Fluoride (F)	Boron (B)	Silica (SiO2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as CaCO3 Total ppm	Hardness as CaCO3 N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																									Median 62. Maximum 7000. Minimum 2.3	USGS
10/4 1150	1700	68	9.1	100	662	7.7	3.01[c]		78 3.39		0.0 0.00	140 2.29		111 3.13			0.1			374[e]	53	150	35	10		
11/14 1145	860	61	9.2	93	840	7.7	1.08[c]		5.0 0.22		0.0 0.00	148 2.43		140 3.95			0.2			474[e]	54	188	67	30		
12/11 1100	-	51	7.5	67	729	7.8	2.96[c]		83 3.61		0.0 0.00	127 2.08		120 3.39			0.5			412[e]	55	148	44	15		
1963																										
1/7 1230	-	48	8.1	70	729	7.8	3.08[c]		86 3.74		0.0 0.00	122 2.00		120 3.39			0.5			410[e]	55	154	54	5		
2/7 1050	870	55	8.1	76	241	7.1	1.10[c]		28 1.22		0.0 0.00	50 0.82		31 0.87			0.2			136[e]	53	55	14	95		
3/12 1030	1660	57	8.5	82	689	7.6	2.98[c]		75 3.26		0.0 0.00	104 1.70		99 2.79			0.5			388[e]	52	149	64	20		
4/9 1315	865	62	9.2	94	442	7.5	2.08[c]		45 1.96		0.0 0.00	92 1.51		59 1.66			0.2			249[e]	49	104	29	25		
5/7 1415	1720	67	9.6	103	297	7.2	17 0.85	7.9 0.65	30 1.30	1.9 0.05	0.0 0.00	69 1.13	29 0.60	38 1.07	0.8 0.01	0.2 0.01	0.0	14	PO_4 0.25 ABS 0.00 As 0.01	174[g]	46	25	18	25		
--												- No	sample	taken -												
7/10 1200	3308	74	7.9	91	240	7.8	1.30[c]		22 0.96		0.0 0.00	63 1.03		15 0.42			0.1			135[e]	42	65	13	45		
8/7 0830	41.85	75	6.5	77	232	8.1	1.61[c]		19 0.83		0.0 0.00	80 1.31		23 0.65			0.1			131[e]	34	81	15	60		
9/10 1200	1720	76	9.6	114	910	7.9	45 2.25	23 1.93	99 4.31	8.4 0.21	0.0 0.00	168 2.75	68 1.42	153 4.32	4.3 0.07	0.2 0.01	0.2	21	PO_4 0.50 ABS 0.01 As 0.00	527[g]	50	209	71	20		

a Field pH.
b Laboratory pH.
c Sum of calcium and magnesium in epm.
d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-6

ANALYSES OF SURFACE WATER

FRESNO RIVER NEAR DAULTON (STA. NO. 113)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 23. Maximum 7000. Minimum 0.62	USGS
--												No sample taken - dry														
11/8 1250	6	68	9.1	100	262	7.8	/1.04[c]		30/1.30		0.0/0.00	58/0.95		49/1.38			0.0			180[e]	56	52	4	2		
12/6 1200	1	51	11.0	98	227	7.7	/1.02[c]		25/1.09		0.0/0.00	56/0.92		39/1.10			0.1			156[e]	52	51	5	3		
1963																										
1/9 1115	12	45	12.0	99	215	7.8	/0.92[c]		23/1.00		0.0/0.00	56/0.92		37/1.04			0.1			147[e]	52	46	0	5		
2/7 1330	100	44	9.7	82	128	7.5	/0.68[c]		12/0.52		0.0/0.00	44/0.72		14/0.39			0.2			88[e]	43	34	0	15		
3/6 1000	68	-	11.0	-	125	7.8	/0.70[c]		11/0.48		0.0/0.00	48/0.78		12/0.34			0.0			86[e]	41	35	0	15		
4/3 1615	640	62	9.7	99	133	7.8	/0.87[c]		11/0.48		0.0/0.00	59/0.97		7.3/0.21			0.0			92[e]	36	44	0	35		
5/9 0935	413	60	9.1	91	114	7.6	10/0.50	2.4/0.20	9.5/0.41	1.5/0.04	0.0/0.00	58/0.95	2.0/0.04	6.0/0.17	1.2/0.02	0.1/0.01	0.1	25	PO_4 0.10	88[g]	36	35	0	10		
6/3 0940	100	68	8.6	94	81	7.8	/0.49[c]		6.4/0.28		0.0/0.00	37/0.61		7.4/0.21			0.0			56[e]	36	24	0	4		
--												- Not scheduled[j] -														
--												- Not scheduled[j] -														
--												- Not scheduled[j] -														

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-7

ANALYSES OF SURFACE WATER

KAWEAH RIVER BELOW TERMINOUS DAM (STA. NO. 35)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																										
10/2 1330	8	67	7.5	81	114	7.6	c / 0.89		5.8 / 0.25		0.0 / 0.00	56 / 0.92		7.6 / 0.21			0.1			60[e]	22	44	0	15	Median 23.	USGS
11/1 1520	6	64	11.6	121	122	8.0	c / 0.92		6.1 / 0.27		0.0 / 0.00	60 / 0.98		5.5 / 0.16			0.0			92[e]	23	46	0	3	Maximum 2400	
12/5 1245	16	50	11.0	97	139	7.7	c / 1.04		6.6 / 0.29		0.0 / 0.00	66 / 1.08		6.0 / 0.17			0.0			76[e]	22	52	0	1	Minimum 0.13	
1963																										
1/7 1000	425	43	9.5	77	150	7.6	c / 1.10		8.0 / 0.35		0.0 / 0.00	75 / 1.23		8.2 / 0.23			0.1			93[g]	24	55	0	1		
2/5 1125	4472	45	11.0	91	45	6.5	c / 0.30		2.1 / 0.09		0.0 / 0.00	16 / 0.26		1.4 / 0.04			0.1			43[g]	23	15	2	10		
3/5 1000	350	46	11.0	92	85	7.4	c / 0.59		3.7 / 0.16		0.0 / 0.00	39 / 0.64		2.8 / 0.08			0.0			63[g]	21	30	0	3		
4/2 1430	625	46	10.0	84	77	6.9	c / 0.56		3.8 / 0.17		0.0 / 0.00	38 / 0.62		1.1 / 0.03			0.0		PO_4 = 0.00	60[g]	23	28	0	2		
5/6 0740	1297	58	9.7	95	78	7.2	10 / 0.50	1.2 / 0.10	3.8 / 0.17	1.4 / 0.04	0.0 / 0.00	40 / 0.66	4.0 / 0.08	2.4 / 0.07	0.0 / 0.00	0.0 / 0.00	0.0	18		63[g]	21	30	0	1		
6/3 1200	944	62	9.2	94	41	6.8	c / 0.32		1.9 / 0.08		0.0 / 0.00	21 / 0.34		1.2 / 0.03			0.0			33[g]	20	16	0	2		
7/1 1240	1540	62	11.0	112	41	6.8	c / 0.32		2.1 / 0.09		0.0 / 0.00	20 / 0.33		1.2 / 0.03			0.0			32[g]	22	16	0	2		
8/8 0930	898	65	8.3	89	57	6.7	c / 0.40		2.6 / 0.11		0.0 / 0.00	26 / 0.43		1.5 / 0.04			0.1		PO_4 = 0.15 As = 0.01 ABS = 0.0	46[g]	22	20	0	4		
9/11 0740	80	72	7.5	81	92	6.8	12 / 0.60	1.5 / 0.12	4.0 / 0.17	1.9 / 0.05	0.0 / 0.00	46 / 0.75	4.0 / 0.08	2.8 / 0.08	2.6 / 0.04	0.3 / 0.02	0.0	9.6		63[g]	18	36	0	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-8

ANALYSES OF SURFACE WATER

KERN RIVER NEAR BAKERSFIELD (STA. NO. 36)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N C ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 6.2	USGS
10/4 0715	383	65	7.4	78	142	7.7	e / 0.92		13 / 0.57		0.0 / 0.00	60 / 0.9[illegible]		8.6 / 0.24			0.1			91[e]	38	46	0	10	Maximum 1300.	
11/7 1115	49	58	9.6	94	183	8.0	e / 0.96		18 / 0.78		0.0 / 0.00	74 / 1.21		8.8 / 0.25			0.2			118[e]	45	48	0	2	Minimum 0.23	
12/5 1045	211	48	9.1	89	195	7.8	c / 1.08		18 / 0.78		0.0 / 0.00	82 / 1.34		9.0 / 0.25			0.2			125[e]	42	54	0	5		
1963																										
1/4 1225	184	40	11.3	87	210	8.1	e / 1.13		20 / 0.87		0.0 / 0.00	94 / 1.54		10 / 0.28			0.1			135[e]	44	56	0	5		
1/31 1430	414	36	11.1	94	200	8.2	e / 1.08		19 / 0.83		0.0 / 0.00	89 / 1.46		11 / 0.31			0.2			129[e]	43	54	0	2.7		
3/5 1050	414	--	10.5	--	150	7.7	e / 0.84		13 / 0.57		0.0 / 0.00	61 / 1.00		7.2 / 0.20			0.1			96[e]	40	42	0	6		
4/2 1215	598	55	10.7	102	151	7.9	e / 0.92		12 / 0.52		0.0 / 0.00	64 / 1.05		6.0 / 0.17			0.2		PO_4 = 0.15, As = 0.01, ABS = 0.0	97[e]	36	46	0	10		
5/8 1200	920	65	9.3	98	151	7.5	16 / 0.80	1.0 / 0.08	13 / 0.57	2.3 / 0.06	0.0 / 0.00	62 / 1.02	13 / 0.27	6.2 / 0.17	0.7 / 0.01	0.4 / 0.02	0.2			95[g]	38	44	0	2		
6/4 1005	735	65	9.0	95	118	7.1	e / 0.72		9.6 / 0.42		0.0 / 0.00	56 / 0.92		5.2 / 0.15			0.1			76[e]	37	36	0	2		
7/8 1115	2033	67	8.2	91	85	7.6	c / 0.53		6.3 / 0.27		0.0 / 0.00	39 / 0.64		3.6 / 0.10			0.0			55[e]	34	26	0	3		
8/8 1115	1966	73	7.2	83	96	7.4	e / 0.62		7.2 / 0.31		0.0 / 0.00	45 / 0.70		3.0 / 0.08			0.0			62[e]	33	31	0	1		
9/16 1100	981	74	8.1	101	109	7.6	10 / 0.50	2.2 / 0.18	8.3 / 0.36		0.0 / 0.00	51 / 0.84	5.0 / 0.10	3.5 / 0.10	3.6 / 0.06	0.4 / 0.02	0.0		ABS = 0.0, As = 0.2, PO_4 = 0.01	68[g]	33	34	0	1		

a Field pH.

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-9

ANALYSES OF SURFACE WATER

KERN RIVER BELOW ISABELLA DAM (STA. NO. 36A)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 23. Maximum 7000. Minimum .09	USGS
10/1 0930	116	68	7.6	83	120	6.9	/0.64[c]		11/0.48		0.0/0.00	50/0.82		8.5/0.24			0.3			76[e]	43	32	0	15		
11/1 1100	-	62	8.4	86	113	7.1	/0.72[c]		8.3/0.36	1.08	0.0/0.00	54/0.89		4.0/0.11			0.1			71[e]	33	36	0	2		
12/3 1130	14	52	10.0	91	125	6.7	/0.78[c]		9.6/0.42		0.0/0.00	62/1.02		3.2/0.09			0.2			79[e]	35	39	0	2		
1963																										
1/2 1130	14	42	11.0	90	132	7.4	/0.87[c]		10/0.44		0.0/0.00	66/1.08		5.2/0.15			0.1			83[e]	34	44	0	3		
2/4 1440	2	51	10.0	90	127	6.5	/0.78[c]		10/0.44		0.0/0.00	57/0.93		6.0/0.17			0.0			80[e]	36	39	0	11		
3/1 1130	2	53	9.7	90	119	7.3	/0.82[c]		71/0.31		0.0/0.00	61/1.00		5.5/0.16			0.1			75[e]	27	41	0	35		
4/2 0900	2	46	10.2	86	132	7.4	/0.89[c]		10/0.44		0.0/0.00	64/1.05		2.9/0.08			0.1			83[e]	33	45	0	10		
5/1 0930	60	48	10.0	87	125	7.3	13/0.65	1.9/0.16	10/0.44	2.0/0.05	0.0/00.0	62/1.02	7.0/0.15	5.2/0.15	0.4/0.01	0.1/0.01	0.1	12	PO_4 0.10	89[g]	34	40	0	4		
6/6 1030	220	50	10.0	89	103	7.2	/0.64[c]		7.6/0.33		0.0/0.00	48/0.79		4.0/0.11			0.0			65[e]	34	32	0	2		
7/2 1000	1563	57	9.5	93	77	7.2	/0.48[c]		5.5/0.24		0.0/0.00	34/0.36		3.5/0.10			0.0			49[e]	33	24	0	3		
--												- Not	scheduled[j] -													
--												- Not	scheduled[j] -													

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

j Effective July 1963, this station sampled only in January, May, July and October.

TABLE D-10
ANALYSES OF SURFACE WATER

KERN RIVER NEAR KERNVILLE (STA. 36b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																									Median 23. Maximum 1300. Minimum 2.3	USGS
10/1 0900	-	59	9.2	91	132	7.2	0.80[c]		13 / 0.57		0.0 / 0.00	58 / 0.95		8.0 / 0.23			0.2			92[e]	42	40	0	8		
11/1 1030	-	53	9.6	88	147	7.5	0.78[c]		15 / 0.65		0.0 / 0.00	66 / 1.08		6.2 / 0.17			0.1			102[e]	45	39	0	3		
12/3 1030	-	41	11.1	87	172	7.4	0.94[c]		17 / 0.74		0.0 / 0.00	77 / 1.26		7.0 / 0.20			0.2			120[e]	44	47	0	1		
1963																										
1/2 1115	166	35	12.3	87	177	7.6	1.24[c]		17 / 0.74		0.0 / 0.00	82 / 1.34		8.4 / 0.24			0.1			123[e]	37	62	0	5		
2/4 1400	1484	42	11.0	87	91	6.8	0.54[c]		7.5 / 0.33		0.0 / 0.00	40 / 0.66		4.0 / 0.11			0.0			63[e]	38	27	0	4		
3/1 1045	546	41	11.5	91	112	7.4	0.64[c]		9.6 / 0.42		0.0 / 0.00	55 / 0.90		5.2 / 0.15			0.1			78[e]	40	32	0	2		
4/2 1030	761	36	12.2	87	113	7.4	0.70[c]		9.5 / 0.41		0.0 / 0.00	57 / 0.93		3.2 / 0.09			0.1			79[e]	37	35	0	5		
5/1 0900	1137	49	10.2	90	93	7.1	9.0 / 0.45	1.7 / 0.14	7.5 / 0.33	1.4 / 0.04	0.0 / 0.00	47 / 0.77	5.0 / 0.10	3.8 / 0.11	0.0 / 0.00	0.1 / 0.01	0.0	20	PO_4 0.00	74[g]	34	29	0	3		
6/6 0845	2769	48	10.4	90	42	6.9	0.26[c]		3.2 / 0.14		0.0 / 0.00	20 / 0.33		2.0 / 0.06			0.0			29[e]	35	13	0	2		
7/2 1300	2494	54	9.8	91	38	6.7	0.23[c]		3.2 / 0.14		0.0 / 0.00	16 / 0.26		2.5 / 0.07			0.0			26[e]	38	12	0	1		
--												- Not	scheduled[j] -													
--												- Not	scheduled[j] -													

Mineral constituents in parts per million / equivalents per million

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control ... Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR) ...

j Effective July 1963, this station sampled only in January, May, July and October.

TABLE D-11

ANALYSES OF SURFACE WATER

KINGS RIVER BELOW NORTH FORK (STA. NO. 33c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median	USGS
10/1 1115	272	66	10.5	111	49	6.9	[c] / 0.31		3.3 / 0.14		0.0 / 0.00	20 / 0.33		2.4 / 0.07			0.0			34[e]	31	16	0	15	23. Maximum 500.	
11/5 1200	194	58	10.0	98	56	7.4	[c] / 0.36		3.6 / 0.16		0.0 / 0.00	24 / 0.39		2.5 / 0.07			0.0			39[e]	31	18	0	1	Minimum 0.62	
12/3 1100	-	46	10.2	86	62	6.9	[c] / 0.40		3.8 / 0.17		0.0 / 0.00	25 / 0.41		2.8 / 0.08			0.0			43[e]	30	20	0	1		
1963																										
1/2 1130	1.35	40	10.6	82	68	7.6	[c] / 0.44		4.2 / 0.18		0.0 / 0.00	28 / 0.46		3.8 / 0.11			0.2			48[e]	29	22	0	0.9		
2/11 1100	1852	48	12.5	107	47	6.9	[c] / 0.29		3.2 / 0.14		0.0 / 0.00	19 / 0.31		2.7 / 0.08			0.1			33[e]	33	14	0	9		
3/4 1130	876	44	10.2	84	46	7.0	[c] / 0.30		2.7 / 0.12		0.0 / 0.00	20 / 0.33		1.5 / 0.04			0.0			32[e]	29	15	0	2		
4/1 1030	1450	47	10.7	94	47	7.1	[c] / 0.32		3.0 / 0.13		0.0 / 0.00	21 / 0.34		0.6 / 0.02			0.0			33[e]	29	16	0	5		
5/6 1100	4238	42	10.4	83	44	7.6	5.9 / 0.29	0.5 / 0.04	2.6 / 0.11	0.8 / 0.02	0.0 / 0.00	22 / 0.36	4.0 / 0.08	1.2 / 0.03	0.0 / 0.00	0.0 / 0.00	0.0	12	PO_4 0.00	41[g]	24	17	0	3		
6/4 1220		55	10.5	100	23	7.0	[c] / 0.16		1.2 / 0.05		0.0 / 0.00	11 / 0.18		1.0 / 0.03			0.0			16[e]	24	8	0	1		
7/8 1300	5200	59	10.3	103	17	6.8	[c] / 0.12		1.1 / 0.05		0.0 / 0.00	8 / 0.13		1.6 / 0.05			0.0			12[e]	29	6	0	1		
--												- Not scheduled[j] -														
--												- Not scheduled[j] -														

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

j Effective July 1963, this station sampled only in January, May, July and October.

TABLE D-12

ANALYSES OF SURFACE WATER

KINGS RIVER BELOW PEOPLES WEIR (STA. NO. 34)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																										
10/4 1120	435	67	8.9	97	62	7.3	c / 0.40		3.3 / 0.14		0.0 / 0.00	29 / 0.48		2.6 / 0.07			0.0			43[e]	26	20	0	10	Median 23	USGS
11/7 1400	39	63	9.1	94	154	8.0	c / 1.14		9.0 / 0.39		0.0 / 0.00	80 / 1.31		4.5 / 0.13			0.0			106[e]	25	57	0	3	Maximum 620.	
12/5 1800	10	54	8.9	82	104	7.5	c / 0.78		5.4 / 0.23		0.0 / 0.00	52 / 0.85		2.0 / 0.06			0.0			71[e]	23	39	0	2	Minimum 0.62	
1963																										
1/4 1430	11	49	10.6	93	105	8.0	c / 0.76		5.7 / 0.25		0.0 / 0.00	52 / 0.85		3.6 / 0.10			0.1			72[e]	25	38	0	2		
2/6 1500	90	48	8.6	74	171	7.8	c / 1.19		9.2 / 0.40		0.0 / 0.00	74 / 1.21		8.2 / 0.23			0.0			117[e]	25	60	0	40		
3/5 1500	110	--	10.4	--	153	7.8	c / 1.14		7.9 / 0.34		0.0 / 0.00	76 / 1.25		5.5 / 0.16			0.0			105[e]	23	57	0	4		
4/2 1520	163	60	9.4	94	116	7.7	c / 0.84		6.2 / 0.27		0.0 / 0.00	55 / 0.90		3.4 / 0.10			0.0			80[e]	24	42	0	5		
5/8 1500	430	69	8.5	95	79	7.5	8.1 / 0.40	1.9 / 0.16	4.2 / 0.18	1.2 / 0.03	0.0 / 0.00	35 / 0.57	4.2 / 0.09	3.0 / 0.08	1.1 / 0.02	0.2 / 0.01	0.0	10	PO_4 = 0.40 As = 0.01 ABS = 0.0	51[f]	23	28	0	1		
6/4 1105	1310	66	8.7	93	51	7.6	c / 0.36		2.8 / 0.12		0.0 / 0.00	23 / 0.38		2.2 / 0.06			0.0			35[e]	25	18	0	1		
7/8 1410	2225	65	8.3	89	28	7.1	c / 0.20		2.2 / 0.10		0.0 / 0.00	13 / 0.21		1.4 / 0.04			0.0			19[e]	33	10	0	2		
8/8 0815	2375	61	8.9	90	43	7.3	c / 0.22		2.6 / 0.11		0.0 / 0.00	20 / 0.33		1.2 / 0.03			0.1			30[e]	33	11	0	3		
9/16 1345	1648	65	8.6	92	32	7.2	3.0 / 0.15	1.0 / 0.08	1.4 / 0.06	1.0 / 0.08	0.0 / 0.00	15 / 0.25	1.0 / 0.02	1.0 / 0.03	1.4 / 0.02	0.0 / 0.00	0.0	6.8	PO_4 = 0.20 As = 0.00 ABS = 0.0	32[g]	19	12	0	3		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-13

ANALYSES OF SURFACE WATER

KINGS RIVER BELOW PINE FLAT DAM (STA. NO. 33b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 13. Maximum 2400. Minimum 0.06	USGS
10/1 1240	1038	68	10.0	110	31	6.9	[c] 0.20		1.7 / 0.07		0.0 / 0.00	14 / 0.23		1.2 / 0.03			0.0			23[e]	26	10	0	10		
11/5 1400	50	66	11.0	118	30	6.7	[c] 0.21		1.4 / 0.06		0.0 / 0.00	14 / 0.23		1.2 / 0.03			0.0			22[e]	22	10	0	2		
12/3 1320	-	60	11.2	102	31	7.4	[c] 0.21		1.6 / 0.07		0.0 / 0.00	13 / 0.21		0.2 / 0.01			0.0			23[e]	25	10	0	1		
1963																										
1/4 1340	205	45	10.4	87	34	7.0	[c] 0.23		1.6 / 0.07		0.0 / 0.00	18 / 0.30		0.3 / 0.01			0.1			25[e]	23	12	0	2		
2/11 1400	21	58	9.5	93	69	7.1	[c] 0.48		3.4 / 0.15		0.0 / 0.00	27 / 0.44		4.4 / 0.12			0.1			51[e]	24	24	2	10		
3/4 1410	177	52	10.8	98	54	7.0	[c] 0.37		2.4 / 0.10		0.0 / 0.00	24 / 0.39		2.0 / 0.06			0.1			40[e]	21	18	0	3		
4/1 1350	776	48	10.9	95	43	6.6	[c] 0.30		2.1 / 0.09		0.0 / 0.00	17 / 0.28		0.4 / 0.01			0.0			32[e]	23	15	1	10		
5/6 1500	1270	44	10.5	86	40	6.9	4.8 / 0.24	0.7 / 0.06	2.0 / 0.09	1.1 / 0.03	0.0 / 0.00	18 / 0.30	2.4 / 0.05	1.1 / 0.03	0.6 / 0.01	0.0 / 0.00	0.0	7.7	PO_4 0.00	41[g]	21	15	0	3		
6/4 1400	-	62	10.6	109	45	6.7	[c] 0.33	1.2 / 0.05	2.6 / 0.11		0.0 / 0.00	22 / 0.36		1.5 / 0.04			0.0			33[e]	25	16	0			
7/8 1500	6880	60	10.2	102	23	6.7	[c] 0.16		1.2 / 0.05		0.0 / 0.00	10 / 0.16		0.8 / 0.02			0.0			17[e]	24	8	0	1		
--												- Not	scheduled[j] -													
--												- Not	scheduled[j] -													

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

j Effective July 1963, this station sampled only in January, May, July and October.

TABLE D-14

ANALYSES OF SURFACE WATER

MERCED RIVER BELOW EXCHEQUER DAM (STA. NO. 32a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 23. Maximum 2400. Minimum 0.23	USGS
10/5 0855	39	70	7.7	96	60	7.3	c / 0.56		2.4 / 0.10		0.0 / 0.00	30 / 0.49		2.8 / 0.08			0.0			43[e]	15	28	3	20		
11/9 1000	50	65	9.2	97	75	7.4	c / 0.59		2.9 / 0.13		0.0 / 0.00	36 / 0.59		3.0 / 0.08			0.0			49[e]	18	30	0	7		
12/7 0915	42	52	10.0	91	77	7.6	c / 0.60		2.7 / 0.12		0.0 / 0.00	34 / 0.56		2.5 / 0.07			0.0			50[e]	17	30	2	7		
1963																										
1/8 1315	-	52	11.3	103	78	7.4	c / 0.66		2.8 / 0.12		0.0 / 0.00	39 / 0.64		3.4 / 0.10			0.2			51[e]	15	33	1	10		
2/8 1430	1537	50	10.8	[illegible]	38	7.0	c / 0.30		1.7 / 0.07		0.0 / 0.00	19 / 0.31		1.8 / 0.05			0.1			25[e]	19	15	0	45		
3/8 1700	730	50	8.8	78	49	7.3	c / 0.36		1.7 / 0.07		0.0 / 0.00	21 / 0.34		1.5 / 0.04			0.0			32[e]	16	18	1	35		
4/3 1245	1551	50	8.4	74	58	7.3	c / 0.45		2.4 / 0.10		0.0 / 0.00	25 / 0.41		0.9 / 0.03			0.0			38[e]	18	22	2	30		
5/ 1230	6100	55	10.4	99	65	7.7	8.0 / 0.40	1.5 / 0.12	2.8 / 0.12	0.7 / 0.02	0.0 / 0.00	30 / 0.49	4.6 / 0.10	2.8 / 0.08	0.5 / 0.01	0.0 / 0.00	0.0	12	PO_4 0.05	54[g]	18	26	1	5		
6/3 1200	4092	56	10.1	97	44	-	c / 0.35		0.12 / 2.2		0.0 / 0.00	21 / 0.34		2.2 / 0.06			0.0			29[e]	22	18	1	2		
7/8 1030	1960	56	10.7	103	29	7.1	c / 0.22		1.6 / 0.07		0.0 / 0.00	14 / 0.23		1.5 / 0.04			0.0			19[e]	24	11	0	2		
--												- Not scheduled[j] -														
--												- Not scheduled[j] -														

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of [illegible]

j Effective July 1963, this station sampled only in January, May, July and October.

ANALYSES OF SURFACE WATER

MERCED RIVER NEAR STEVINSON (STA. NO. 32)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																									Median 23.	USGS
10/5 1200	173	67	9.4	102	209	7.9	[c] 1.36		20 / 0.87		0.0 / 0.00	97 / 1.59		14 / 0.39			0.0			135[e]	39	68	0	15	Maximum 620.	
11/8 1300	120	62	11.0	112	320	7.9	[c] 1.88		34 / 1.46		0.0 / 0.00	150 / 2.46		19 / 0.54			0.0			206[e]	44	94	0	4	Minimum 2.3	
12/6 1245	112	54	10.2	95	324	8.0	[c] 1.84		32 / 1.39		0.0 / 0.00	143 / 2.34		19 / 0.54			0.0			209[e]	43	92	0	2		
1963																										
1/10 1245	130	46	10.8	91	302	8.2	[c] 1.70		30 / 1.30		0.0 / 0.00	142 / 2.33		18 / 0.51			0.0			194[e]	43	85	0	3		
2/7 1300	158	57	8.6	83	254	7.1	[c] 1.45		24 / 1.04		0.0 / 0.00	111 / 1.82		16 / 0.45			0.0			164[e]	42	72	0	15		
3/7 1345	314	60	8.8	88	169	7.7	[c] 1.04		13 / 0.57		0.0 / 0.00	80 / 1.31		7.2 / 0.20			0.0			109[e]	35	52	0	10		
4/1 1400	995	58	10.2	100	77	7.1	[c] 0.61		3.5 / 0.15		0.0 / 0.00	33 / 0.54		0.6 / 0.02			0.0			50[e]	20	31	4	25		
5/8 1300	1619	61	10.8	110	78	7.4	8.8 / 0.44	1.9 / 0.16	3.7 / 0.16	0.8 / 0.02	0.0 / 0.00	36 / 0.59	4.0 / 0.08	1.6 / 0.05	0.9 / 0.01	0.1 / 0.01	0.0	12	PO_4 0.10 ABS 0.0	59[g]	21	30	0	20		
6/3 1245	3290	64	9.2	96	57	7.9	[c] 0.44		2.6 / 0.11		0.0 / 0.00	27 / 0.44		1.5 / 0.04			0.0			37[e]	20	22	0	10		
7/8 1030	360	65	9.0	95	200	7.8	[c] 1.18		19 / 0.83		0.0 / 0.00	95 / 1.56		11 / 0.31			0.0			129[e]	41	59	0	6		
8/8 1050	240	75	7.5	88	236	8.1	[c] 1.26		24 / 1.04		0.0 / 0.00	104 / 1.70		15 / 0.42			0.1			152[e]	45	63	0	4		
9/10 1115	219	72	7.8	89	242	7.9	17 / 0.85	6.0 / 0.49	23 / 1.00	2.1 / 0.05	0.0 / 0.00	106 / 1.74	9.0 / 0.19	16 / 0.45	4.4 / 0.07	0.2 / 0.01	0.0	25	PO_4 0.35 AS 0.00 ABS 0.00	156[g]	42	67	0	2		

Mineral constituents in parts per million / equivalents per million.

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d **Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)**

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-16

ANALYSES OF SURFACE WATER

SALT SLOUGH AT SAN LUIS RANCH (STA. NO. 24c)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen % Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																										USGS
10/5 1100	25	65	9.8	104	1750	8.2	6.99[c]		250/10.88		0.0/0.00	217/3.56	203/4.23	353/9.96			0.6			1052[e]	61	350	172	15	Median 230.	
11/9 1315	54	65	7.1	75	1760	7.9	7.38[c]		248/10.79		0.0/0.00	234/3.84	256/5.33	303/8.55			1.1			1058[e]	59	369	177	25	Maximum 7000	
12/7 1415	18	54	11.8	110	2180	8.3	8.90[c]		294/12.79		4/0.13	237/3.88	229/4.77	460/12.98			0.6			1310[e]	60	425	224	15	Minimum 13.	
1963																										
1/10 1050	114	48	9.7	84	2290	7.9	9.10[c]		320/13.92		0.0/0.00	270/4.43	409/8.52	367/10.35			2.0			1376[e]	60	455	234	25		
2/8 1210	101	61	6.8	69	2860	8.0	11.58[c]		425/18.49		0.0/0.00	239/3.92	624/12.99	488/13.77			3.4			1719[e]	61	579	383	25		
3/8 1500	142	62	8.0	82	2650	8.1	10.64[c]		372/16.18		0.0/0.00	234/3.84	590/12.26	408/11.51			3.7			1593[e]	60	532	340	20		
4/1 1500	220	61	8.6	87	2120	8.0	8.40[c]		270/11.74		0.0/0.00	200/3.28	392/8.16	304/8.58			2.1		PO_4 0.70	1274[e]	58	420	256	30		
5/8 1445	165	66	7.9	85	1390	7.8	62/3.09	32/2.67	172/7.48		0.0/0.00	132/2.16	280	202/5.70	6.5/0.10	0.4/0.02	1.5	19		878[g]	56	228	180	170		
6/3 0930	159	66	6.2	66	1070	8.0	4.40[c]		131/5.70		0.0/0.00	135/2.21	158	174/4.91						643[e]	56	220	109	50		
7/8 1330	108	77	6.5	78	1010	8.1	4.32[c]		118/5.13		0.0/0.00	154/2.52	132	157/4.43						607[e]	54	216	90	100		
8/8 1210	64	74	5.3	62	1080	8.4	4.56[c]		130/5.66		0.0/0.00	160/2.62		205/5.78					PO_4 0.55 AS 0.01 ABS 0.0	649[e]	55	228	97	70		
9/10 0940	60	70	6.0	67	1180	8.2	2.74[c]	32/2.60	140/6.09		0.0/0.00	184/3.02	117/2.44	210/5.92	9.1/0.15	0.3/0.06	0.5	27		690[g]	53	267	116	40		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-17

ANALYSES OF SURFACE WATER

SAN JOAQUIN RIVER AT CROWS LANDING BRIDGE (STA. NO. 26b)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen % Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO3)	Bicarbonate (HCO3)	Sulfate (SO4)	Chloride (Cl)	Nitrate (NO3)	Fluoride (F)	Boron (B)	Silica (SiO2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as CaCO3 Total ppm	Hardness as CaCO3 N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																										
10/4 1100	--	68	9.2	100	836	7.9	3.48[c]		108 4.70		0.0 0.00	163 2.67		136 3.84			0.2			491[g]	57	174	40	15	Median 62.	USGS
11/8 1115	--	60	9.1	91	1210	8.2	5.00[c]		166 7.22		0.0 0.00	222 3.64		196 5.53			0.4			919[g]	59	250	68	10	Maximum 2400.	
12/6 1135	--	55	9.8	91	1540	8.2	6.12[c]		202 8.79		0.0 0.00	206 3.58		255 7.19			0.7			932[e]	59	306	137	10	Minimum 2.4	
1963																										
1/10 1145	--	47	11.0	94	1280	8.1	5.04[c]		170 7.40		0.0 0.00	237 3.88		195 5.50			0.7			796[g]	59	252	58	25		
2/7 1200	--	56	7.3	70	718	7.9	2.87[c]		93 4.05		0.0 0.00	133 2.18		94 2.65			0.6			458[g]	59	144	35	170		
3/7 1130	--	57	8.9	86	1460	8.1	5.52[c]		188 8.18		0.0 0.00	184 3.02		224 6.32			1.4			920[g]	60	276	125	25		
4/1 1200	--	60	10.3	103	551	7.6	2.45[c]		62 2.70		0.0 0.00	99 1.62		70 1.97			0.4			329[g]	52	123	42	30		
5/8 1115	--	64	9.7	101	638	8.0	28 1.40	15 1.20	76 3.31	2.3 0.06	0.0 0.00	100 164	89 1.85	90 2.54	2.9 0.05	0.2 0.01	0.5	17	PO_4 = 0.40	377[g]	55	130	48	55		
6/3 1145	--	64	8.9	93	186	7.6	0.94[c]		18 0.78		0.0 0.00	44 0.72		100 0.56			0.1			110[g]	45	47	11	25		
7/8 0945	--	64	8.6	90	738	8.0	3.08[c]		91 3.96		0.0 0.00	133 2.18		110 3.10			0.3			429[g]	56	154	45	15		
8/8 1020	--	77	7.5	89	926	8.2	3.76[c]		114 4.96		0.0 0.00	164 2.69		152 4.29			0.3			556[g]	57	188	54	35		
9/10 1250	--	74	9.2	107	773	8.5	37 1.85	21 1.71	90 3.92	30 0.08	78 0.37	158 2.21	79 1.64	112 3.16	4.3 0.07	0.2 0.01	0.2	55	PO_4 = 0.60 As = 0.01 ABS = 0.00	480[f]	52	178	48	40		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-18

ANALYSES OF SURFACE WATER

SAN JOAQUIN AT FREMONT FORD BRIDGE (STA. NO. 25c)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 23.	USGS
10/4 1300	63	68	8.9	98	1690	8.1	[c] / 6.99		228 / 9.92		0.0 / 0.00	206 / 3.38	164 / 3.41	354 / 9.99			0.3			985[e]	58	350	181	15	Maximum 2400.	
11/8 1200	38	61	9.0	91	2170	7.9	[c] / 8.72		292 / 12.70		0.0 / 0.00	218 / 3.57	224 / 4.66	452 / 12.75			0.5			1265[e]	59	436	257	10	Minimum 0.62	
12/7 1450	21	53	9.0	84	3840	7.8	[c] / 15.28		520 / 22.62		0.0 / 0.00	250 / 4.10	430 / 8.95	885 / 24.97			0.9			2239[e]	60	764	559	15		
1963																										
1/11 0900	273	40	10.9	85	1550	8.4	[c] / 6.10		206 / 8.96		7 / 0.23	240 / 3.93	238 / 4.96	224 / 6.32			1.1			904[e]	59	305	97	20		
2/8 1245	756	60	7.4	74	931	7.8	[c] / 3.68		59 / 5.13		0.0 / 0.00	143 / 2.34	148 / 3.08	122 / 3.44			0.8			543[e]	58	184	67	90		
3/8 1545	251	62	10.1	105	2660	8.0	[c] / 10.84		368 / 16.01		0.0 / 0.00	238 / 3.90	508 / 10.58	455 / 12.84			2.8			1551[e]	60	542	347	10		
4/1 1430	865	60	10.4	104	856	7.9	[c] / 3.70		111 / 4.83		0.0 / 0.00	133 / 2.18	99 / 2.06	114 / 3.22			0.6			499[e]	57	185	76	40		
5/8 1345	353	71	11.7	132	1390	7.9	68 / 3.39	30 / 2.50	178 / 7.74	4.0 / 0.10	0.0 / 0.00	170 / 2.79	222 / 4.62	223 / 6.29	6.4 / 0.10	0.3 / 0.02	1.1	21	PO_4 0.60 AS 0.01 ABS 0.0	844[g]	56	294	155	35		
6/3 1000	507	69	9.3	103	849	8.0	[c] / 3.70		104 / 4.52		0.0 / 0.00	145 / 2.38	107 / 2.23	130 / 3.67			0.5			495[e]	55	185	66	70		
7/8 1230	245	76	11.0	130	932	7.9	[c] / 4.00		110 / 4.78		0.0 / 0.00	152 / 2.49		148 / 4.18			0.4			543[e]	54	200	75	30		
8/8 1135	119	77	8.1	98	1440	7.8	[c] / 6.16		178 / 7.74		0.0 / 0.00	184 / 3.02		280 / 7.90			0.2			840[e]	56	308	157	40		
9/10 1015	267	70	7.4	82	1340	8.0	58 / 2.89	34 / 2.78	169 / 7.35	4.3 / 0.11	0.0 / 0.00	197 / 3.23	136 / 2.83	240 / 6.77	3.9 / 0.06	0.2 / 0.01	0.4	25	PO_4 0.40 AS 0.00 ABS 0.00	799[g]	56	284	122	25		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-19

ANALYSES OF SURFACE WATER

SAN JOAQUIN RIVER AT FRIANT (STA. NO. 24)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 23.	USGS
10/5 1320	91	56	12.3	117	60	7.1	c / 0.30		6.4 / 0.28		0.0 / 0.00	20 / 0.33		6.0 / 0.17			0.1			48[e]	48	15	0	20	Maximum 2400.	
11/8 1145	79	49	9.5	83	55	7.1	c / 0.30		4.8 / 0.21		0.0 / 0.00	22 / 0.36		40 / 0.11			0.0			44[e]	41	15	0	3	Minimum 1.3	
12/6 1040	69	45	12.3	102	51	7.5	c / 0.27		4.7 / 0.20		0.0 / 0.00	20 / 0.33		3.4 / 0.10			0.0			41[e]	43	14	0	3		
1963																										
1/9 1300	63	51	12.1	108	48	7.2	c / 0.26		3.7 / 0.16		0.0 / 0.00	19 / 0.31		3.9 / 0.11			0.1			39[e]	38	13	0	4		
2/7 1235	50	41	11.0	86	62	7.1	c / 0.34		4.7 / 0.20		0.0 / 0.00	23 / 0.38		5.8 / 0.16			0.0			50[e]	37	17	0	20		
3/6 0900	74	-	11.0	-	47	7.3	c / 0.23		3.5 / 0.15		0.0 / 0.00	18 / 0.30		3.8 / 0.11			0.0			38[e]	39	12	0	8		
4/4 1215	61	57	13.7	132	52	7.3	c / 0.28		4.2 / 0.18		0.0 / 0.00	20 / 0.33		4.8 / 0.14			0.0			42[e]	39	14	0	7		
5/9 0830	63	50	7.7	68	59	6.7	4.2 / 0.21	1.3 / 0.11	4.5 / 0.20		0.0 / 0.00	22 / 0.36	1.0 / 0.02	3.8 / 0.11	2.2 / 0.04	0.1 / 0.01	0.1	10	PO_4 0.25	45[g]	37	16	0	10		
6/3 0845	138	52	10.4	95	43	7.6	c / 0.24		3.6 / 0.16		0.0 / 0.00	16 / 0.26		3.5 / 0.10			0.0			35[g]	40	12	0	10		
7/9 0645	153	49	9.1	89	41	7.1	c / 0.22		3.3 / 0.14		0.0 / 0.00	15 / 0.25		3.0 / 0.08			0.0			33[g]	39	11	0	4		
--											- Not scheduled[j] -															
--											- Not scheduled[j] -															

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

j Effected July 1963, this station sampled only in January, May, July and October.

TABLE D-20

ANALYSES OF SURFACE WATER

SAN JOAQUIN RIVER NEAR GRAYSON (STA. NO. 26)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 70. Maximum 7000. Minimum 6.2	USGS
10/18 1115	425	62	6.0	62	1190	8.0	4.99[c]		168 / 7.31		0.0 / 0.00	214 / 3.51		208 / 5.87			0.3			707[e]	59	249	74	15		
--												No	sample	taken												
12/10 1645	225	55	7.9	74	1720	7.9	7.42[c]		212 / 9.22		0.0 / 0.00	258 / 4.23		282 / 7.96			0.6			1022[e]	55	371	159	6		
1963																										
1/7 1450	375	50	9.8	85	1560	8.2	6.49[c]		200 / 8.70		0.0 / 0.00	236 / 3.87		309 / 8.72			0.7			927[e]	57	324	180	4		
2/15 0955	4885	56	7.7	73	373	7.5	1.58[c]		44 / 1.91		0.0 / 0.00	88 / 1.44		42 / 1.18			0.1			222[e]	55	79	7	140		
3/8 1640	75	61	7.4	75	1420	7.8	5.68[c]		194 / 8.44		0.0 / 0.00	196 / 3.21		210 / 5.92			1.1			843[e]	60	284	123	15		
4/3 1345	2140	56	9.1	87	568	7.5	2.48[c]		68 / 2.96		0.0 / 0.00	103 / 1.69		74 / 2.09			0.3			337[e]	54	124	40	30		
5/6 0815	2050	69	6.4	70	531	7.5	21 / 1.05	16 / 1.29	60 / 2.61	2.2 / 0.06	0.0 / 0.00	103 / 1.69	68 / 1.42	70 / 1.97	3.3 / 0.05	0.2 / 0.01	0.3	17	PO_4 0.50	312[g]	52	117	33	100		
6/7 1145	3050	70	6.0	67	295	7.9	1.48[c]		30 / 1.30		0.0 / 0.00	70 / 1.15		37 / 1.04			0.1			175[e]	47	74	17	35		
7/1 1345	1150	75	7.3	86	767	8.0	3.38[c]		91 / 3.96		0.0 / 0.00	132 / 2.16		114 / 3.22			0.3			456[e]	[illegible]4	169	61	10		
8/1 0950	450	76	8.3	99	1070	7.9	4.96[c]		125 / 5.44		0.0 / 0.00	204 / 3.34		168 / 4.74			0.3			636[e]	52	[illegible]48	81	25		
9/6 1235	520	76	6.8	93	942	7.5	43 / 2.15	24 / 1.47	121 / 5.26	3.5 / 0.09	0.0 / 0.00	186 / 3.05	98 / 2.04	148 / 4.18	5.2 / 0.08	0.4 / 0.02	0.2	28	PO_4 0.65, As 0.00, ABS 0.0	552[g]	56	206	53	20		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

SAN JOAQUIN RIVER AT HILLS FERRY BRIDGE (STA. NO. 25b)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 62. Maximum 7000. Minimum 6.2	USGS
10/4 1230	315	69	9.6	108	849	8.1	3.59[c]		114 / 4.96		0.0 / 0.00	143 / 2.43	85 / 1.77	143 / 4.03			0.2			494[e]	58	180	59	20		
11/8 1245	260	61	8.5	86	1340	8.0	5.52[c]		184 / 8.00		0.0 / 0.00	223 / 3.65	148 / 3.08	226 / 6.38			0.5			780[e]	59	276	93	25		
12/6 1215	220	54	9.4	103	1610	7.9	6.28[c]		206 / 8.96		0.0 / 0.00	204 / 3.34	196 / 4.08	274 / 7.73			0.6			937[e]	59	314	15	15		
1963																										
1/10 1215	650	47	11.0	94	1520	8.4	5.94[c]		212 / 9.22		6.0 / 0.20	252 / 4.13	218 / 4.54	240 / 6.77			1.0			885[e]	61	297	81	20		
2/7 1240	1750	56	7.3	70	845	8.0	3.65[c]		108 / 4.70		0.0 / 0.00	147 / 2.41	128 / 2.66	120 / 3.39			0.9			492[e]	56	183	62	100		
3/7 1200	738	58	9.0	88	2510	8.2	9.52[c]		360 / 15.66		0.0 / 0.00	260 / 4.26	465 / 9.68	422 / 11.90			2.7			1461[e]	62	476	263	25		
4/1 1315	2045	61	9.7	98	967	7.9	4.10[c]		141 / 6.13		0.0 / 0.00	146 / 2.39	151 / 3.54	133 / 3.75			0.8		PO_4 0.55	563[e]	60	205	85	30		
5/6 1215	1720	66	10.1	108	1260	8.0	49 / 2.45	31 / 2.57	164 / 7.13	4.0 / 0.10	0.0 / 0.00	141 / 2.31	219 / 4.56	202 / 5.70	3.6 / 0.06	0.2 / 0.01	1.0	18		786[g]	58	251	135	90		
6/3 1215	3700	66	8.9	100	438	7.4	1.88[c]		50 / 2.18		0.0 / 0.00	69 / 113	62 / 1.29	62 / 1.75			0.3			255[e]	54	94	37	55		
												----Discontinued 7-1-63----														

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-22

ANALYSES OF SURFACE WATER

SAN JOAQUIN RIVER AT MAZE ROAD BRIDGE (STA. NO. 26a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 230. Maximum 7000. Minimum 2.3	USGS
10/18 1045		62	5.5	57	699	7.8	[c] 2.94		87 3.78		0.0 0.00	118 1.93		121 3.41			0.2			390[e]	56	147	50	10		
12/10 1610		54	8.0	74	527	7.5	[c] 2.22		56 2.44		0.0 0.00	78 1.28		86 2.43			0.1			294[e]	52	111	47	2		
1963																										
1/7 1555		50	9.1	81	774	7.7	[c] 3.21		90 3.92		0.0 0.00	118 1.93		131 3.70			0.2			432[e]	55	160	63	7		
2/14 1540		55	7.8	74	261	6.9	[c] 1.22		27 1.17		0.00 0.00	65 1.07		31 0.87			0.1			146[e]	49	61	8	160		
3/8 1600		59	7.7	76	891	7.6	[c] 3.64		114 4.96		0.0 0.00	132 2.16		136 3.84			0.6			497[e]	58	182	74	15		
4/3 1410		60	9.4	94	404	7.2	[c] 1.61		42 1.83		0.0 0.00	77 1.26		53 1.50			0.2		PO_4 0.35	225[e]	50	91	27	20		
5/6 0715		65	8.7	92	379	7.5	20 1.00	9.5 0.78	38 1.65	1.8 0.05	0.0 0.00	82 1.34	39 0.81	50 1.41	2.3 0.04	0.1 0.01	0.2	17		221[g]	47	89	22	50		
6/7 1100		68	6.2	68	276	7.6	[c] 1.38		28 1.22		0.0 0.00	64 1.05		38 1.07			0.0			154[e]	47	69	17	35		
7/1 1315		71	5.5	62	465	7.2	[c] 2.03		52 2.26		0.0 0.00	78 1.28		75 2.12			0.1			259[e]	53	102	38	10		
8/1 0900		75	9.0	106	1050	7.6	[c] 4.68		120 5.22		0.0 0.00	171 2.80		204 5.75			0.2			586[e]	53	234	94	60		
9/6 1255		76	7.5	89	976	7.5	48 2.40	23 1.92	118 5.13	4.8 0.12	0.0 0.00	178 2.92	71 1.48	179 5.05	4.0 0.06	0.02 0.01	0.1	29	PO_4 0.65 AS 0.0 ABS 0.00	570[g]	54	216	70	15		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-23

ANALYSES OF SURFACE WATER

SAN JOAQUIN RIVER NEAR MENDOTA (STA. NO. 25)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																										
10/5 0900	125	67	9.6	103	730	8.2	3.25[c]		86 / 3.74		0.0 / 0.00	144 / 2.36		122 / 3.44			0.2			422[e]	54	162	44	20	Median 23.0	USGS
11/9 1200	48	64	12.6	130	908	8.2	4.06[c]		112 / 4.87		0.0 / 0.00	152 / 2.49		154 / 4.34			0.4			525[e]	55	203	78	15	Maximum 7000	
12/7 1230	131	53	11.8	109	819	7.8	3.66[c]		90 / 3.92		0.0 / 0.00	138 / 2.26		133 / 3.75			0.5			473[e]	52	183	70	15	Minimum 0.62	
1963																										
1/10 0915	24	45	11.7	98	744	8.3	3.32[c]		84 / 3.65		2 / 0.07	145 / 2.38		123 / 3.47			0.2			430[e]	52	166	45	25		
2/8 1045	98	57	12.8	123	920	8.1	4.15[c]		114 / 4.96		0.0 / 0.00	137 / 2.25		158 / 4.46			0.6			532[e]	54	208	96	15		
3/8 1345	162	64	10.9	113	502	7.9	2.08[c]		58 / 2.52		0.0 / 0.00	89 / 1.46		70 / 1.97			0.4			290[e]	55	104	31	25		
4/2 0915	156	58	14.2	139	1060	7.9	4.64[c]		128 / 5.57		0.0 / 0.00	152 / 2.49		175 / 4.94			0.5		PO_4 = 0.25	613[e]	55	232	107	15		
5/14 0725	381	63	9.3	96	323	7.4	9.2 / 0.46	13 / 1.11	30 / 1.30	1.7 / 0.04	0.0 / 0.00	70 / 1.15	39 / 0.81	36 / 1.02	2.5 / 0.04	0.2 / 0.01	0.2	15		195[g]	45	78	21	100		
6/3 1220	415	70	8.3	93	192	7.7	0.98[c]		18 / 0.78		0.0 / 0.00	46 / 0.75		22 / 0.62			0.0			111[e]	44	49	11	50		
7/9 0925	448	75	7.4	87	474	8.0	2.22[c]		50 / 2.18		0.0 / 0.00	93 / 1.52		71 / 2.00			0.1			274[e]	50	111	35	55		
8/8 1400	441	79	7.7	94	280	7.4	1.60[c]		26 / 1.13		0.0 / 0.00	85 / 1.39		31 / 0.87			0.1			162[e]	41	80	10	55		
9/10 0750	156	72	7.4	85	503	7.9	27 / 1.35	15 / 1.23	48 / 2.09	2.2 / 0.06	0.0 / 0.00	114 / 1.87	41 / 0.85	76 / 2.14	1.7 / 0.03	0.1 / 0.01	0.2	15	PO_4 = 0.50; ABS = 0.0; As = 0.01	285[g]	44	129	36	60		

a Field pH.
b Laboratory pH.
c Sum of calcium and magnesium in epm.
d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-24

ANALYSES OF SURFACE WATER

SAN JOAQUIN RIVER AT PATTERSON BRIDGE (STA. NO. 27a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 1300.	USGS
10/4 1000		67	7.7	83	820	8.0	c / 3.44		1.14 / 4.96		0.0 / 0.00	174 / 2.85		130 / 3.67			0.2			490[g]	59	174	31	15	Maximum 7000.	
11/8 1045		60	5.8	58	1340	8.1	c / 5.40		1.80 / 7.83		0.0 / 0.00	234 / 3.84		221 / 6.23			0.4			807[e]	59	270	78	5	Minimum 7	
12/6 1115		55	7.1	67	1570	7.8	c / 6.24		208 / 9.05		0.0 / 0.00	210 / 3.44		272 / 7.67			0.7			945[e]	59	312	140	10		
1963																										
1/11 1020	660	43	10.6	86	1310	8.4	c / 5.16		178 / 7.74		0.0 / 0.00	227 / 3.72		195 / 5.50			0.8			819[g]	60	258	61	15		
2/7 1130	2075	55	7.2	68	682	7.6	c / 6.38		84 / 3.65		0.0 / 0.00	129 / 2.11		86 / 2.43			0.6			412[g]	57	137	21	95		
3/7 1015	950	56	8.0	76	1380	8.0	c / 5.22		182 / 7.92		0.0 / 0.00	181 / 2.97		208 / 5.87			1.2			851[g]	60	261	113	20		
4/1 1115	2200	60	9.6	96	513	7.7	c / 2.24		52 / 2.26		0.0 / 0.00	94 / 1.54		65 / 1.83			0.4			308[g]	50	112	35	35		
5/8 1015	1475	64	9.4	98	762	7.6	32 / 1.60	18 / 1.48	93 / 4.05	2.6 / 0.07	0.0 / 0.00	119 / 1.95	111 / 2.13	111 / 3.13	3.3 / 0.05	0.2 / 0.01	0.5	18	PO_4 0.45	459[g]	56	154	56	60		
6/3 1115	3700	65	8.6	91	197	7.5	c / 1.00		18 / 0.78		0.0 / 0.00	50 / 0.82		22 / 0.62			0.1			117[g]	44	50	9	20		
7/8 0910	760	64	8.2	87	774	7.9	c / 3.28		95 / 4.13		0.0 / 0.00	143 / 2.34		114 / 3.22			0.2			448[g]	56	164	47	9		
8/8 0930		76	7.5	89	937	7.6	c / 3.80		117 / 5.09		0.0 / 0.00	172 / 2.82		150 / 4.23			0.3			552[g]	57	190	49	25		
9/10 1300		73	8.5	98	776	7.8	37 / 1.85	19 / 1.53	92 / 4.00	3.0 / 0.08	0.0 / 0.00	164 / 2.69	76 / 1.58	114 / 3.22	4.9 / 0.08	0.3 / 0.02	0.2	25	PO_4 0.8; AS 0.01; ABS 0.0	453[g]	54	169	35	20		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-25

ANALYSES OF SURFACE WATER

SAN JOAQUIN RIVER NEAR VERNALIS (STA. NO. 27)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 620.	USGS
10/4 0915	1000	67	7.2	78	912	8.0	[c] 4.12		120/5.22		0.0/0.00	181/2.97		161/4.54			0.2			514[e]	56	206	58	15	Maximum 7000.	
11/8 0930	1250	60	8.1	81	727	7.8	[c] 3.20		88/3.83		0.0/0.00	132/2.16		122/3.44			0.2			410[e]	54	160	52	10	Minimum 13.	
12/6 1030	2200	55	8.7	82	399	7.6	[c] 1.68		42/1.83		0.0/0.00	68/1.11		64/1.81			0.2			225[e]	52	84	28	15		
1963																										
1/11 1145	2020	46	9.7	82	665	8.3	[c] 2.78		79/3.44		1/0.03	132/2.16		108/3.05			0.2			375[e]	55	139	30	10		
2/7 1100	11,110	55	8.2	77	167	7.1	[c] 0.81		17/0.74		0.0/0.00	42/0.69		20/0.56			0.1			94[e]	48	41	7	120		
3/7 1015	2543	55	8.4	79	763	7.5	[c] 3.18		86/3.74		0.0/0.00	125/2.05		114/3.22			0.4			430[e]	54	159	57	20		
4/1 1000	8709	54	10.6	98	183	7.6	[c] 0.94		17/0.74		0.0/0.00	48/0.79		20/0.56			0.0			103[e]	44	47	8	25		
5/8 0930	7180	58	9.5	93	237	7.7	16/0.80	5.8/0.48	21/0.91	1.6/0.04	0.0/0.00	65/1.07	21/0.44	26/0.73	1.2/0.02	0.2/0.01	0.1	15	PO_4 0.25 ABS 0.0	141[g]	41	64	11	20		
6/3 0715	11,700	64	8.0	84	162	7.7	[c] 0.90		13/0.57		0.0/0.00	42/0.69		19/0.54			0.0			91[e]	39	45	11	25		
7/10 0930	2100	73	8.6	98	681	7.7	[c] 3.2		74/3.22		0.0/0.00	131/2.15		109/3.07			0.2			384[e]	50	160	53	15		
8/7 1015	1235	76	9.8	116	916	8.1	[c] 4.16		102/4.44		0.0/0.00	172/2.82		167/4.71			0.2			517[e]	52	208	67	35		
9/10 0945	1340	75	7.9	93	816	7.8	49/2.45	16/1.31	91/3.96	3.9/0.10	0.0/0.00	165/2.70	56/1.17	130/3.67	6.6/0.11	0.1/0.01	0.2	24	PO_4 0.60 AS 0.00 ABS 0.1	471[g]	51	188	53	20		

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-26

ANALYSES OF SURFACE WATER

STANISLAUS RIVER NEAR MOUTH (STA. NO. 29)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																									Median 62.	USGS
10/3 0845	131	66	7.5	80	246	8.2	[c] 1.80		16 / 0.70		0.0 / 0.00	132 / 2.16		11 / 0.31			0.1			166[g]	27	90	0	30	Maximum 7000.	
11/9 0915	185	58	9.1	89	198	8.0	[c] 1.60		11 / 0.48		0.0 / 0.00	110 / 1.80		4.8 / 0.14			0.0			134[e]	23	80	0	3	Minimum 0.3	
12/6 1000	56	55	9.3	88	257	7.9	[c] 2.00		14 / 0.61		0.0 / 0.00	131 / 2.15		7.5 / 0.21			0.0			173[e]	23	100	0	5		
1963																										
1/11 1200	181	47	10.9	94	225	8.3	[c] 1.75		12 / 0.52		0.0 / 0.00	121 / 1.98		7.8 / 0.22			0.0			152[e]	23	88	0	5		
2/7 1015	3931	55	9.8	93	78	7.1	[c] 0.61		2.9 / 0.15		0.0 / 0.00	37 / 0.61		1.5 / 0.04			0.0			53[e]	18	30	0	70		
3/7 0945	250	57	8.8	85	312	8.2	[c] 2.38		18 / 0.78		0.0 / 0.00	157 / 2.57		12 / 0.34			0.0			211[e]	25	119	0	6		
4/1 0915	2897	53	10.8	99	84	7.9	[c] 0.72		2.6 / 0.11		0.0 / 0.00	42 / 0.69		0.5 / 0.01			0.0			57[e]	13	36	2	35		
5/8 0830	4830	55	10.0	95	77	7.5	9.3 / 0.42	2.4 / 0.20	2.8 / 0.12	0.8 / 0.02	0.0 / 0.00	38 / 0.62	6.2 / 0.13	1.5 / 0.04	0.4 / 0.01	0.2 / 0.01	0.0	15	PO_4 0.15 AS 0.01 ABS 0.0	61[g]	15	33	2	25		
6/3 0845	4879	60	8.8	88	66	7.7	[c] 0.48		4.0 / 0.17		0.0 / 0.00	32 / 0.52		1.8 / 0.05			0.0			45[e]	26	24	0	25		
7/10 0900	262	72	9.4	106	250	7.6	[c] 1.97		12 / 0.52		0.0 / 0.00	132 / 2.16		8.8 / 0.25			0.0			169[e]	21	98	0	4		
8/7 1255	214	76	13.2	156	264	7.5	[c] 1.96		15 / 0.65		0.0 / 0.00	142 / 2.33		7.6 / 0.22			0.0			178[e]	25	98	0	6		
9/10 1045	243	75	7.7	90	230	7.5	22 / 1.10	8.3 / 0.68	12 / 0.52	2.8 / 0.07	0.0 / 0.00	118 / 1.93	9.0 / 0.19	6.2 / 0.17	3.1 / 0.05	0.2 / 0.01	0.0	27	PO_4 0.15 AS 0.01 ABS 0.0	144[g]	22	89	0	2		

Mineral constituents in parts per million / equivalents per million

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of ... Water Resources (DWR); as indicated.

TABLE D-27

ANALYSES OF SURFACE WATER

STANISLAUS RIVER BELOW TULLOCH DAM (STA. NO. 29a)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																									Median 21.0	USGS
10/5 1020	-	63	8.3	86	56	7.1	[c] / 0.44		2.5 / 0.11		0.0 / 0.00	28 / 0.46		3.6 / 0.10			0.0				20	22	0	20	Maximum 620.	
11/9 1215	145	60	8.2	82	54	7.0	[c] / 0.44		1.8 / 0.08		0.0 / 0.00	28 / 0.46		1.2 / 0.03			0.0				15	22	0	4	Minimum 0.23	
12/7 1025	-	50	9.3	83	78	7.3	[c] / 0.64		2.7 / 0.12		0.0 / 0.00	35 / 0.57		1.0 / 0.03			0.0				16	32	3	2		
1963																										
1/8 1035	-	47	10.6	91	64	7.7	[c] / 0.52		2.0 / 0.09		0.0 / 0.00	34 / 0.56		0.8 / 0.02			0.0				15	26	0	2		
2/15 1130	878	51	10.6	95	49	6.9	[c] / 0.38		1.7 / 0.07		0.0 / 0.00	22 / 0.36		1.0 / 0.03			0.1				16	19	1	40		
3/11 1115	-	56	10.8	105	51	7.2	[c] / 0.37		2.2 / 0.10		0.0 / 0.00	24 / 0.39		1.8 / 0.05			0.0				21	18	0	5		
4/3 1130	1840	57	9.8	95	57	7.5	[c] / 0.49		2.1 / 0.09		0.0 / 0.00	28 / 0.46		0.2 / 0.01			0.0				16	24	1	15		
5/13 1215	5006	56	12.1	115	59	7.9	7.2 / 0.36	1.7 / 0.14	2.2 / 0.10	0.6 / 0.02	0.0 / 0.00	32 / 0.32	3.4 / 0.07	1.6 / 0.05	0.4 / 0.01	0.0 / 0.00	0.0	13	PO_4 0.00	48[g]	16	25	0	3		
6/3 0920	4202	60	10.7	107	44	7.5	[c] / 0.34		2.1 / 0.09		0.0 / 0.00	24 / 0.39		1.5 / 0.04			0.0				21	17	0	3		
7/8 0830	1800	60	9.7	97	42	7.2	[c] / 0.32		2.0 / 0.09		0.0 / 0.00	22 / 0.36		1.5 / 0.04			0.0				22	16	0	2		
--												- Not	scheduled[j] -													
--												- Not	scheduled[j] -													

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

j Effective July 1963, this station sampled only in January, May, July and October

TABLE D-28

ANALYSES OF SURFACE WATER

TULE RIVER BELOW SUCCESS DAM (STA. NO. 91)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																										
10/2 0950	1.60 / 4	76	7.5	89	244	- / 7.6	c / 1.99		13 / 0.57		0.0 / 0.00	147 / 2.41		7.5 / 0.21			0.0			160[e]	22	100	0	2	Median 50.	USGS
11/11 1350	/ 11	63	10.0	104	263	/ 7.9	c / 2.16		14 / 0.61		0.0 / 0.00	158 / 2.59		5.8 / 0.16			0.0			173[e]	22	108	0	5	Maximum 2400.	
12/4 1000	2.26 / 15	58	8.7	85	288	- / 7.6	c / 2.33		16 / 0.70		0.0 / 0.00	171 / 2.80		8.0 / 0.23			0.1			189[e]	23	116	0	3	Minimum 0.23	
1963																										
1/10 0900	2.14 / 12	50	9.3	83	320	- / 7.7	c / 2.59		17 / 0.74		0.0 / 0.00	190 / 3.11		11 / 0.31			0.0			199[g]	22	130	0	1		
2/7 0945	6.54 / 740	54	10.2	98	162	- / 7.4	c / 1.24		8.7 / 0.38		0.0 / 0.00	85 / 1.39		5.2 / 0.15			0.0			124[g]	23	62	0	60		
3/4 1300	1.49 / 3	62	15.8	162	249	- / 7.7	c / 2.00		12 / 0.52		0.0 / 0.00	142 / 2.33		8.0 / 0.23			0.0			152[g]	21	100	0	7		
4/2 1320	4.60 / 160	54	11.2	104	196	- / 7.9	c / 1.67		1.1 / 0.48		0.0 / 0.00	110 / 1.80		3.4 / 0.10			0.1			139[g]	22	84	0	8		
5/6 1211	3.85 / 85	58	11.9	117	163	- / 7.5	21 / 1.05	2.7 / 0.22	9.0 / 0.39	2.2 / 0.06	0.0 / 0.00	88 / 1.44	4.0 / 0.08	5.4 / 0.15	0.5 / 0.01	0.2 / 0.01	0.0	21	PO_4 = 0.00 ABS = 0.0	113[g]	23	63	0	4		
6/3 1230		58	10.6	104	162	- / 7.3	c / 1.28		8.5 / 0.37		0.0 / 0.00	91 / 1.49		5.8 / 0.16			0.0			110[g]	22	64	0	1		
7/1 0932	/ 126	59	9.2	92	159	- / 7.2	c / 1.22		8.0 / 4.35		0.0 / 0.00	89 / 1.46		5.4 / 0.15			0.0			109[g]	22	61	0	1		
8/5 1235	5.67 / 391	68	7.3	80	163	- / 7.4	c / 1.44		8.3 / 0.36		0.0 / 0.00	91 / 1.49		4.0 / 0.11			0.0			110[g]	20	72	0	2		
9/9 1045	4.61 / 162	80	8.2		218	- / 8.2	28 / 1.40	3.9 / 0.32	10 / 0.44	2.5 / 0.06	0.0 / 0.00	126 / 2.07	0.18 / 0.10	3.7 / 0.10	0.4 / 0.01	0.3 / 0.02	0.1	15	ABS = 0.0 PO_4 = 0.00 As = 0.01	135[g]	20	86	0	10		

Mineral constituents in parts per million / equivalents per million

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS) ; San Bernardino County Flood
Public Health (LBDPH); Terminal Testing Laboratories, Inc (TTL); or California Department of Water Resources (DWR), as indicated

TABLE D-29

ANALYSES OF SURFACE WATER

TUOLUMNE RIVER BELOW DON PEDRO DAM (STA. NO. 31a)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N C ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																									Median 23. Maximum 7000. Minimum 0.28	USGS
10/18 1400		61	7.7	78	27	7.0	[c] 0.16		1.5 0.07		0.0 0.00	10 0.16		2.4 0.07			0.0			21[e]	30	8	0	[illegible]		
--												- No sample taken -														
12/10 1030	2900	54	9.4	88	21	6.6	[c] 0.17		0.9 0.04		0.0 0.00	9 0.15		2.0 0.06			0.0			16[e]	19	8	1	4		
1963																										
1/7 1100	2150	50	9.9	88	24	7.0	[c] 0.17		1.0 0.04		0.0 0.00	10 0.16		0.6 0.02			0.0			18[e]	19	[illegible]	0	3		
2/14 1210	2800	49	10.3	90	32	6.5	[c] 0.24		1.5 0.07		0.0 0.00	13 0.21		1.8 0.05			0.0			24[e]	23	12	[illegible]	40		
3/8 1345	780	49	9.7	85	37	7.0	[c] 0.28		1.4 0.06		0.0 0.00	16 0.26		1.6 0.05			0.0			28[e]	18	14	[illegible]	5		
4/4 1145	1300	50	9.4	84	53	6.8	[c] 0.47		2.1 0.09		0.0 0.00	24 0.39		1.0 0.03			0.0			40[e]	16	24	4	30		
5/6 1520	2500	51	9.3	84	60	7.0	6.3 0.31	2.1 0.49	3.0 0.05	0.8 0.00	0.0 0.00	30 0.49	2.4 0.05	2.2 0.06	0.4 0.01	0.0 0.00	0.0	13	PO_4 0.10	48[g]	21	24	0	3		
6/7 1500	4390	60	7.5	75	55	7.1	[c] 0.42		2.6 0.11		0.0 0.00	26 0.43		1.8 0.05			0.0			42[e]	21	21	0	[illegible]		
7/1 0935	5220	59	4.0	40	46	7.0	[c] 0.34		2.4 0.10		0.0 0.00	20 0.33		2.0 0.06			0.0			35[e]	23	7	1	1		
--												- Not scheduled[j] -														
--												- Not scheduled[j] -														

a Field pH

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

j Effective July 1963, this station sampled only in January, May, July and October.

TABLE D-30

ANALYSES OF SURFACE WATER

TUOLUMNE RIVER AT HICKMAN-WATERFORD BRIDGE (STA. NO. 30)

Mineral constituents in parts per million / equivalents per million (each cell: ppm / epm)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen % Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
1962																									Median 230. Maximum 7000. Minimum 2.3	USGS
10/ 1300	-	65	8.0	85	116	7.0	/ 0.60[c]		11 / 0.48		0.0 / 0.00	32 / 0.52		21 / 0.59			0.0			68[e]	44	30	4	15		
--												- No sample taken -														
12/10 [illegible]	488	54	[illegible].5	89	67	7.0	/ 0.36[c]		5.3 / 0.23		0.0 / 0.00	18 / 0.30		10 / 0.28			0.0			39[e]	39	18	3	2		
1963																										
1/7 1245	-	51	10.2	[illegible]3	102	7.5	/ 0.52[c]		8.8 / 0.38		0.0 / 0.00	29 / 0.48		15 / 0.42			0.0			59[e]	42	26	2	1		
2/14 1350	6085	52	11.6	105	59	6.8	/ 0.38[c]		3.8 / 0.17		0.0 / 0.00	21 / 0.34		5.0 / 0.14			0.0			34[e]	31	19	2	60		
3/8 0915	504	54	10.7	101	127	7.1	/ 0.66[c]		9.9 / 0.43		0.0 / 0.00	33 / 0.54		21 / 0.59			0.0			74[e]	39	33	6	10		
4/3 1620	7120	57	10.6	103	95	7.[illegible]	/ 0.61[c]		5.9 / 0.26		0.0 / 0.00	34 / 0.56		8.4 / 0.24			0.0			55[e]	30	30	2	5		
5/6 1410	780	59	11.2	111	116	7.6	8.6 / 0.43	43 / 0.35	8.0 / 0.35	1.2 / 0.03	0.0 / 0.00	40 / 0.66	3.6 / 0.07	1.5 / 0.42	0.1 / 0.00	0.0 / 0.00	0.0	15	PO_4 0.00	79[g]	30	39	6	3		
6/7 1340	791	61	7.9	85	[illegible]0	7.8	/ 0.42[c]		11 / 0.48		0.0 / 0.00	42 / 0.69		6.0 / 0.17			0.0			52[e]	53	21	0	4		
7/1 1045	692	63	7.1	74	58	7.7	/ 0.35[c]		3.8 / 0.17		0.0 / 0.00	22 / 0.36		7.6 / 0.21			0.0			34[e]	33	18	0	1		
8/ 1630	49	86	7.[illegible]	88	479	7.[illegible]	/ 2.10[c]		52 / 2.26		0.0 / 0.00	104 / 1.70		102 / 2.88			0.1			291[e]	52	105	20	3		
[illegible]/6 1430	48	78	9.9	119	499	8.0	28 / 1.40	11 / 0.88	51 / 2.22	5.2 / 0.13	0.0 / 0.00	108 / 1.77	5.0 / 0.10	100 / 2.82	1.7 / 0.03	0.4 / 0.02	0.0	46	PO_4 0.25, ABS 0.00, As 0.02	306[g]	48	114	25	5		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of [illegible] Department of Water Resources (DWR); as indicated.

TABLE D-31

ANALYSES OF SURFACE WATER

TUOLUMNE RIVER AT TUOLUMNE CITY (STA. NO. 31)

Date and time sampled P.S.T	Discharge in cfs	Temp in °F	Dissolved oxygen ppm	Dissolved oxygen %Sat	Specific conductance (micromhos at 25°C)	pH[b]	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[d]	Total dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N C ppm	Turbidity in ppm	Coliform[h] MPN/ml	Analyzed by[i]
							Mineral constituents in parts per million / equivalents per million																			
1962																									Median 700. Maximum 7000. Minimum 6.	USGS
10/19 1125	945	63	4.8	49	370	7.0	c / 1.60		41 / 1.78		0.0 / 0.00	68 / 1.11		76 / 2.14			0.1			212[e]	53	80	24	15		
--												- No	sample	taken -												
12/11 0900	1500	53	8.1	75	196	7.1	c / 0.89		19 / 0.83		0.0 / 0.00	36 / 0.59		39 / 1.10			0.0			112[e]	48	44	14	4		
1963																										
1/7 1405	925	51	8.7	78	316	7.3	c / 1.44		31 / 1.35		0.0 / 0.00	63 / 1.03		61 / 1.72			0.0			181[e]	48	72	20	3		
2/15 0915	4700	52	9.5	87	78	6.5	c / 0.44		5.7 / 0.25		0.0 / 0.00	19 / 0.31		11 / 0.31			0.0			45[e]	36	22	6	70		
3/8 1720	975	58	7.3	71	334	7.0	c / 1.51		50 / 1.52		0.0 / 0.00	63 / 1.03		66 / 1.86			0.0			191[e]	50	75	23	9		
4/3 1145	100	56	8.3	79	161	7.2	c / 0.94		13 / 0.57		0.0 / 0.00	41 / 0.67		24 / 0.68						92[e]	38	47	13	10		
5/6 0848	1180	61	7.3	74	174	7.3	13 / 0.65	4.3 / 0.35	14 / 0.61	1.7 / 0.04	0.0 / 0.00	54 / 0.89	4.8 / 0.10	24 / 0.68	1.3 / 0.02	0.1 / 0.01	0.0	16	PO_4 0.25 As 0.01 ABS 0.0	107[g]	32	50	6	15		
6/7 1215	1675	67	5.9	64	195	7.4	c / 1.04		17 / 0.78		0.0 / 0.00	45 / 0.74		34 / 0.96			0.0			112[e]	42	52	15	.		
7/1 1200	-	70	4.8	53	190	7.3	c / 0.87		18 / 0.78		0.0 / 0.00	37 / 0.61		37 / 1.04			0.0			109[e]	47	44	14	6		
8/1 1040	425	76	8.4	100	799	7.4	c / 3.36		91 / 3.96		0.0 / 0.00	150 / 2.46		168 / 4.74			0.2			457[e]	54	168	45	7		
9/6 1310	375	77	5.8	70	843	7.4	50 / 250	14 / 1.14	96 / 4.18	7.5 / 0.19	0.0 / 0.00	162 / 2.66	9.0 / 0.19	181 / 5.11	4.2 / 0.07	0.2 / 0.01	0.0	40	PO_4 1.2 As 0.02 ABS 0.1	513[g]	52	182	49	3		

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in epm.

d Arsenic (As), alkyl benzene sulfonate (ABS), and phosphate (PO_4)

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

TABLE D-32
SPECTROGRAPHIC ANALYSES OF SURFACE WATER

Station	Sta No	Date	Constituents in parts per billion																
			Aluminum (Al)	Beryllium (Be)	Bismuth (Bi)	Cadmium (Cd)	Cobalt (Co)	Chromium (Cr)	Copper (Cu)	Iron (Fe)	Gallium (Ga)	Germanium (Ge)	Manganese (Mn)	Molybdenum (Mo)	Nickel (Ni)	Lead (Pb)	Titanium (Ti)	Vanadium (V)	Zinc (Zn)
San Joaquin River at Fremont Ford Bridge	25c	5-8 9-10	137 7.3	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	7.3 5.8	6.7* 13*	1.3* 0.67*	3.3* 7.3	16 13	1.3* 2.7	3.3* 3.3*	1.3* 1.3*	15 15	6.7* 13*
San Joaquin River near Vernalis	27	5-8 9-10	51 9.3	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	19 6.2	6.7* 13*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3	1.3* 2.6*	3.3* 3.3*	1.3* 1.3*	11 13	6.7* 13*
Stanislaus River near Mouth	29	5-8 9-10	247 11	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	19 11	6.7* 13*	1.3* 0.67*	3.3* 3.3*	1.3* 0.67**	1.3* 0.67**	3.3* 3.3*	1.3* 1.3*	5.1 12	6.7* 13*
Tuolumne River at Tuolumne City	31	5-6 9-6	45 8.0	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	15 100***	6.7* 13*	1.3* 0.67*	3.3* 10	1.3* 0.67**	2.5 1.5	3.3* 3.3*	1.3* 1.3*	10 14	6.7* 13*
Merced River near Stevinson	32	5-8 9-10	79 15	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	35 19	6.7* 13*	1.3* 0.67*	3.3* 3.3*	1.3** 2.1	1.3* 1.7	3.3* 3.3*	1.3* 3.3*	1.3** 12	6.7* 13*
Kinga River below People's Weir	34	5-6 9-16	223 11	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	38 3.3*	33 17	6.7* 13*	1.3* 0.67*	1.3* 3.3*	1.3** 0.67**	1.3* 0.67**	3.3* 3.3*	1.3* 1.3*	1.3** 0.67*	6.7* 13*
Kern River near Bakersfield	36	5-9 9-16	150 10	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	17 9.3	6.7* 13*	1.3* 0.67*	3.3* 3.3*	5.2 4.0	1.3* 2.2	3.3* 3.3*	1.3* 1.3*	1.3** 0.67*	6.7* 13*
Tule River below Success Dam	91	5-6 9-9	26 13	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	19 12	6.7* 13*	1.3* 0.67*	3.3* 3.3*	1.3** 0.67**	1.3* 4.1	3.3* 3.3*	1.3* 1.3*	6.7 7.3	6.7* 13*
Delta-Mendota Canal near Mendota	92	5-10 9-10	39 153	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	16 38	6.7* 13*	1.3* 0.67*	3.3* 3.3*	1.3** 0.67**	1.3* 1.3	3.3* 3.3*	1.3* 1.3*	12 19	6.7* 13*
Delta Mendota Canal near Tracy	93	5-7 9-10	47 6.7	1.3* 1.3*	1.3* 0.67*	3.3* 3.3*	1.3* 3.3*	1.3* 3.3*	3.3* 3.3*	15 6.7	6.7* 13*	1.3* 0.67*	3.3* 3.3*	1.3** 4.0	1.3* 2.6	3.3* 3.3*	1.3* 1.3*	15 17	6.7* 13*

Note: For all stations in the month of May, silver was reported as: Silver (Ag) = 5.0*

* Results are less than the figure listed.
** Results are equal to, but slightly less than the figure indicated.
*** Results are more than the figure listed.

Station	Sta. No	Date	Picocuries per liter			
			Dissolved Alpha	Solid Alpha	Dissolved Beta	Solid Beta
Big Creek above Pine Flat Dam	33d	5/6	0.0 ± 0.2	0.0 ± 0.2	3.9 ± 4.8	3.7 ± 4.8
Chowchilla River near Raymond	114	5/9	0.0 ± 0.2	0.8 ± 0.3	21.6 ± 4.9	102.4 ± 5.9
		10/7	0.3 ± 0.4	0.1 ± 0.3	8.2 ± 6.0	1.5 ± 6.0
Delta-Mendota Canal near Mendota	92	5/10	0.1 ± 0.4	1.4 ± 0.6	11.6 ± 6.4	32.6 ± 6.7
		9/10	0.7 ± 0.4	0.5 ± 0.4	0.6 ± 6.0	4.0 ± 6.1
Fresno River near Daulton	113	5/9	0.0 ± 0.2	1.2 ± 0.4	9.4 ± 4.8	33.9 ± 5.1
		10/7	0.0 ± 0.3	0.0 ± 0.3	8.1 ± 5.9	9.5 ± 6.0
Kaweah River below Terminus Dam	35	5/6	0.2 ± 0.2	0.1 ± 0.2	12.3 ± 5.0	5.1 ± 4.9
Kern River near Bakersfield	36	9/11	0.0 ± 0.3	0.0 ± 0.3	0.0 ± 6.2	0.0 ± 6.2
		5/6	0.5 ± 0.3	0.9 ± 0.4	0.0 ± 6.5	4.2 ± 6.6
Kern River below Isabella Dam	36a	5/1	0.2 ± 0.2	0.3 ± 0.3	14.4 ± 4.9	15.6 ± 4.9
Kern River below Kernville	36b	5/1	0.1 ± 0.2	0.2 ± 0.3	12.5 ± 4.8	8.4 ± 4.8
Kings River below North Fork	33c	5/6	0.0 ± 0.3	0.3 ± 0.4	3.9 ± 6.4	8.1 ± 6.4
Kings River below Peoples Weir	34	5/5	0.1 ± 0.2	0.1 ± 0.2	9.4 ± 4.8	8.6 ± 4.8
		9/16	0.0 ± 0.2	0.1 ± 0.3	4.1 ± 6.2	1.4 ± 6.2
Kings River below Pine Flat Dam	33b	5/6	0.0 ± 0.6	0.0 ± 0.6	0.0 ± 6.2	5.9 ± 6.3
Merced River below Exchequer Dam	32a	5/9	0.1 ± 0.2	0.0 ± 0.2	14.5 ± 4.9	9.2 ± 4.9
Merced River near Stevinson	32	5/8	0.1 ± 0.2	0.2 ± 0.2	9.3 ± 4.8	13.2 ± 4.9
		9/10	0.6 ± 0.4	0.4 ± 0.4	6.8 ± 6.0	8.6 ± 6.0
Salt Slough at San Luis Ranch	24c	5/8	0.5 ± 0.4	0.7 ± 0.5	2.3 ± 6.7	0.0 ± 6.7
		9/10	0.4 ± 0.4	1.0 ± 0.5	8.0 ± 6.0	6.5 ± 6.0

TABLE D-33

RADIOASSAYS OF SURFACE WATER

Station	Sta No	Date	Picocuries per liter			
			Dissolved Alpha	Solid Alpha	Dissolved Beta	Solid Beta
San Joaquin River at Crows Landing Bridge	26b	5/8 9/10	0.3 ± 0.2 0.7 ± 0.5	0.5 ± 0.2 0.2 ± 0.4	14.5 ± 4.8 10.7 ± 6.3	18.5 ± 4.8 3.2 ± 6.2
San Joaquin River at Fremont Ford Bridge	25c	5/8 9/10	0.8 ± 0.3 0.3 ± 0.5	0.4 ± 0.2 0.3 ± 0.5	18.6 ± 4.8 3.8 ± 6.2	12.4 ± 4.7 6.3 ± 6.2
San Joaquin River at Friant Dam	24	5/9	0.0 ± 0.4	0.1 ± 0.5	0.7 ± 6.6	0.4 ± 6.6
San Joaquin River near Grayson	26	5/6 9/6	0.6 ± 0.3 0.4 ± 0.4	0.7 ± 0.3 0.1 ± 0.3	11.5 ± 4.9 7.3 ± 6.2	20.3 ± 5.0 7.6 ± 6.2
San Joaquin River at Hills Ferry Br.	25b	5/8	0.3 ± 0.2	0.6 ± 0.2	13.2 ± 4.8	16.4 ± 4.8
San Joaquin River at Maze Road Bridge	26a	5/6 9/6	0.3 ± 0.2 0.6 ± 0.5	0.4 ± 0.3 0.2 ± 0.4	8.5 ± 4.8 5.8 ± 6.2	15.0 ± 4.9 2.3 ± 6.2
San Joaquin River near Mendota	25	5/14 9/10	0.6 ± 0.4 0.0 ± 0.4	0.7 ± 0.5 0.6 ± 0.5	6.9 ± 6.2 5.6 ± 6.0	20.5 ± 6.5 2.5 ± 6.0
San Joaquin River at Patterson Bridge	27a	5/8 9/10	0.1 ± 0.5 0.4 ± 0.4	0.7 ± 0.6 0.3 ± 0.4	11.4 ± 6.6 10.7 ± 6.1	9.6 ± 6.5 3.1 ± 6.0
San Joaquin River near Vernalis	27	5/8 9/10	0.2 ± 0.3 1.0 ± 0.6	0.7 ± 0.4 0.6 ± 0.6	10.0 ± 66 9.9 ± 6.1	7.7 ± 6.6 3.9 ± 6.0
Stanislaus River near Mouth	29	5/8 9/10	0.0 ± 0.2 0.1 ± 0.3	0.5 ± 0.3 0.2 ± 0.4	14.8 ± 4.8 5.5 ± 6.1	20.2 ± 4.9 1.4 ± 6.0
Stanislaus River below Tulloch Dam	29a	5/13	0.0 ± 0.4	0.0 ± 0.3	5.7 ± 6.3	16.0 ± 6.5
Tule River below Success Dam	91	5/6 9/9	0.1 ± 0.2 0.0 ± 0.3	0.0 ± 0.1 0.0 ± 0.2	14.7 ± 4.9 3.2 ± 6.2	2.2 ± 4.7 0.2 ± 6.2

Station	Sta No	Date	Picocuries per liter			
			Dissolved Alpha	Solid Alpha	Dissolved Beta	Solid Beta
Tuolumne River below Don Pedro Dam	31a	5/6	0.1 ± 0.2	0.0 ± 0.2	18.3 ± 5.0	23.9 ± 5.0
Tuolumne River at Hickman-Water Ford Bridge	30	5/6	0.1 ± 0.4	0.4 ± 0.4	11.3 ± 6.4	10.5 ± 6.4
Tuolumne River at Tuolumne City	31	5/6	0.2 ± 0.2	0.7 ± 0.3	6.3 ± 4.9	11.3 ± 5.0
		9/6	0.8 ± 0.5	0.2 ± 0.4	6.5 ± 6.3	4.0 ± 6.2

APPENDIX E

GROUND WATER QUALITY

TABLE OF CONTENTS

LIST OF TABLES

LIST OF PLATES

(Bound at end of volume)

INTRODUCTION

This appendix contains data pertaining to the ground water quality conditions in the San Joaquin alley area. The data consist of the chemical and radiological characteristics of those waters sampled. he analyses represent those constituents determined as most significant in the evaluation and/or surveillance f ground water quality. These data are listed on tables and portrayed on plates.

EXPLANATION OF TABLES

All data in the Appendix E Tables are listed by ground water basin or area which are shown on late E-1. The order is by the corresponding number found under the name. Following this breakdown the ells are tabulated numerically by state well numbers as explained on page C-6.

Table E-1 lists the mineral analyses of the selected wells for the area reported in this volume. he following tabulation indicates the tests made and the properties and constituents usually determined n the two types of mineral analyses.

Constituents and properties	Analysis: Standard mineral	Analysis: Partial mineral
Specific conductance	x	x
pH	x	
Total dissolved solids	x	
Percent sodium	x	
Hardness	x	x
Temperature	x	x
Calcium	x	
Magnesium	x	
Sodium	x	x
Potassium	x	
Carbonate	x	
Bicarbonate	x	
Sulfate	x	
Chloride	x	x
Nitrate	x	
Fluoride	x	
Boron	x	x
Silica	x	

The standard mineral analysis is made on the samples of wells either new to the program or whose revious analyses have been unstable from year to year requiring a more complete history before partial nalysis would be suitable. A partial mineral analysis is suitable when a satisfactory history on the well as been established and a detailed analysis is not required to maintain surveilance.

Heavy metal analyses are shown on Table E-2 and list other important constituents not determined n a standard mineral analysis. These constituents, though small in quantity, can be of significance for arious types of water usages.

Radioassay analyses are shown on Table E-3. The type of test conducted was for gross radio- ctivity since the purpose is mainly for reconnaissance by random sampling and a detailed analysis is not equired.

Two constituents not normally determined, ABS (detergents) and lithium, were analysed for in elected samples, and are shown on Table E-4. ABS determinations are made because of their use as an ndicator of pollution. Lithium was determined in response to a request from the Kern County Farm Advisor ecause it has a detrimental effect similar to that of boron on citrus and other fruit trees.

Wells whose analyses differ significantly from other wells in the surrounding area are listed in Table E-5. This deviation may be in a single constituent or it may be the complete analysis. Special effort is made to investigate these wells to determine the reason for the observed deviations.

EXPLANATION OF PLATES

The locations of the selected sampling wells and the selected wells for water measurements re shown on Plate C-3.

EXPLANATION OF PLATES (Continued)

The ground water basins and areas sampled during this reporting period are shown on Plate E-1 with their corresponding name and number. Plate E-2 shows the "Lines of Equal Electrical Conductivity of Ground Water" in the San Joaquin Valley. These contours are based on analyses listed on Table E-1 and represent the quality of water from the principal pumped zone in the valley. Contours were not drawn for Panoche, Tehachapi, and Cummings Valleys because of the lack of data.

Plate E-3 shows the types of water in the San Joaquin area and is based on the analyses listed on Table E-1.

EXPLANATION OF HEADINGS AND SYMBOLS USED IN TABLE E-1

State Well Number--The well numbering system used in this report for the location of wells is explained on page C-6.

Region, Basin, and Area Designation--The region used in this report and shown on Plate E-1, "Ground Water Quality Basins and Areas, San Joaquin Valley," is a geographic area and is defined in Section 13040 of the Water Code as Central Valley region. A decimal system of the form 0-00.00 has been used for basin numbering. The number to the left of the dash refers to the geographic region. On the right of the dash the first two digits refer to a hydrographic unit, generally designated as a basin, valley, or area. These are followed by decimals which designate a subbasin, area, or subarea within the basin, valley, or area. An example is given below:

5-22.20 The number 5 indicates the Central Valley region.

The number 22 indicates the San Joaquin Valley.

The number 20 indicates the Lower Kings River area.

Agency supplying data--The numbers in this column are the code numbers for the agency that sampled the well.

The last three digits of the agency code are numbers that designate, within specified serial limits, the type of agency from which the data were obtained, as follows:

Code	Type of Agency
000 through 049	Federal
050 through 099	State
100 through 199	County
200 through 399	Municipal
400 through 699	District--Water, Irrigation, Conservation, etc.
700 through 999	Private

The cooperating agencies, and code numbers assigned to them, are listed in the following tabulation:

Agency Code	Agency
5000	U. S. Geological Survey
5050	Department of Water Resources
5122	Stanislaus County Farm Advisor
5123	Tulare County Farm Advisor
5124	Kern County Farm Advisor
5126	Kings County Farm Advisor
5524	Turlock Irrigation District
5525	Merced Irrigation District
5631	Fresno Irrigation District
5640	Buena Vista Water Storage District
5641	Central California Irrigation District

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
OAKDALE IRRIGATION DIST						52206												
2S/10E- 3D 1 M 8-19-63	5122	73	7.3	57	9 0.45 69	1 0.08 12	2 0.09 14	1 0.03 5	0	27 0.44 76	3 0.06 10	3 0.08 14	0.0	0.1	0.00	10	42 37	27
2S/10E-10B 1 M 8-14-63	5122	72	--	146	--	--	8 0.35	--	--	--	--	2 0.06	--	--	0.00	--		55
2S/10E-27H 1 M 8-14-63	5122	71	--	409	--	--	26 1.13	--	--	--	--	14 0.39	--	--	0.00	--		153
3S/10E-13A 1 M 6-28-63	5122	71	7.0	49	7 0.35 64	1 0.08 15	2 0.09 16	1 0.03 5	0	24 0.39 65	6 0.12 20	2 0.06 10	1.8 0.03 5	0.1	0.00	10	43 36	22
MODESTO IRRIGATION DIST						52207												
3S/ 7E-13A 1 M 6-26-63	5050	64	8.3	530	24 1.20 22	26 2.14 39	48 2.09 38	4 0.10 2	5 0.17 3	228 3.74 69	18 0.37 7	27 0.76 14	22.0 0.35 6	0.1	0.10	48	334 322	167
3S/ 7E-24J 1 M 6-26-63	5050	63	--	534	--	--	73 3.17	--	--	--	--	18 0.51	--	--	0.20	--		118
3S/ 8E- 6N 1 M 6-26-63	5050	64	--	536	--	--	52 2.26	--	--	--	--	26 0.73	--	--	0.30	--		142
3S/ 8E- 9C 1 M 6-26-63	5050	63	--	457	--	--	24 1.04	--	--	--	--	11 0.31	--	--	0.20	--		179
3S/ 8E-20J 1 M 6-26-63	5050	63	--	521	--	--	34 1.48	--	--	--	--	18 0.51	--	--	0.30	--		192

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
MODESTO IRRIGATION DIST						52207 (CONTINUED)												
3S/ 8E-23E 1 M 9-12-63	5050	66	--	472	--	--	32 1.39	--	--	--	--	14 0.39	--	--	0.10	--		172
4S/ 8E- 5P 1 M 6-27-63	5050	63	8.1	700	34 1.70 23	17 1.40 19	93 4.04 56	4 0.10 1	0	216 3.54 50	12 0.25 4	108 3.05 43	12.0 0.19 3	0.1	0.50	40	427 414	155
4S/10E- 1D 1 M 7-30-63	5122	70	--	392	--	--	40 1.74	--	--	--	--	59 1.66	--	--	0.30	--		84
TURLOCK IRRIGATION DIST						52208												
4S/ 8E-24A 1 M 9-18-63	5524	66	8.0	753	54 2.69 37	16 1.32 18	71 3.09 43	3 0.08 1	0	191 3.13 45	14 0.29 4	114 3.21 46	24.0 0.39 6	--	0.05	--	390 433	201
4S/ 8E-27L 1 M 9-18-63	5524	66	8.0	1440	63 3.14 20	16 1.32 9	250 10.87 70	4 0.10 1	0	240 3.93 26	82 1.71 11	337 9.50 63	2.6 0.04	0.1	0.40	31	904 882	223
4S/ 9E-20A 1 M 9-18-63	5524	66	--	535	--	--	45 1.96	--	--	--	--	40 1.13	--	--	0.20	--		158
4S/ 9E-25A 1 M 9-26-63	5524	67	--	433	--	--	33 1.43	--	--	--	--	20 0.56	--	--	0.00	--		137
4S/ 9E-30R 1 M 9-19-63	5524	--	--	643	--	--	75 3.26	--	--	--	--	42 1.16	--	--	0.00	--		158
4S/11E- 5M 2 M 9- 5-63	5122	--	--	255	--	--	48 2.09	--	--	--	--	32 0.90	--	--	0.20	--		8

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200 TURLOCK IRRIGATION DIST 52208 (CONTINUED)																		
4S/11E-21D 1 M 9-19-63	5524	67	--	196	--	--	17 0.74	--	--	--	--	4 0.11	--	--	0.00	--		60
4S/11E-31E 1 M 9-18-63	5524	67	--	320	31 1.55 44	8 0.66 19	29 1.26 36	2 0.05 1	0	156 2.56 76	8 0.17 5	8 0.23 7	26.0 0.42 12	0.1	0.00	47	236 256	111
5S/ 9E- 1R 1 M 9-20-63	5524	67	--	890	--	--	127 5.52	--	--	--	--	134 3.78	--	--	0.10	--		153
5S/ 9E- 9A 1 M 9-20-63	5524	65	--	550	--	--	51 2.22	--	--	--	--	24 0.68	--	--	0.20	--		162
5S/ 9E-13G 1 M 9-20-63	5122	65	--	556	--	--	52 2.26	--	--	--	--	26 0.73	--	--	0.00	--		169
5S/10E- 4F 1 M 9-23-63	5524	66	--	536	--	--	42 1.83	--	--	--	--	20 0.56	--	--	0.10	--		180
5S/10E-23E 1 M 6-27-63	5050	74	8.4	570	45 2.25 35	26 2.14 33	45 1.96 30	3 0.08 1	6 0.20 3	217 3.56 57	27 0.56 9	55 1.55 25	21.0 0.34 5	0.1	0.10	39	374 398	220
5S/10E-28H 1 M 9-26-63	5524	65	--	565	--	--	56 2.43	--	--	--	--	20 0.56	--	--	0.00	--		168
5S/10E-30F 1 M 9-20-63	5524	66	--	743	--	--	110 4.78	--	--	--	--	42 1.18	--	--	0.10	--		136

* TDS by Evap at 105°c

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY TURLOCK IRRIGATION DIST					52200	52208 (CONTINUED)												
5S/11E- 7P 1 M 9-16-63	5524	65	--	532	--	--	30 1.30	--	--	--	--	14 0.39	--	--	0.20	--		205
5S/11E-29F 1 M 9-16-63	5524	66	--	283	--	--	21 0.91	--	--	--	--	10 0.28	--	--	0.10	--		96
6S/10E- 2H 1 M 9-16-63	5524	65	--	561	--	--	41 1.78	--	--	--	--	23 0.65	--	--	0.10	--		207
6S/10E- 9B 1 M 9-16-63	5524	65	--	682	--	--	71 3.09	--	--	--	--	46 1.30	--	--	0.20	--		172
6S/10E-24L 1 M 9-16-63	5524	65	--	433	--	--	51 2.22	--	--	--	--	22 0.62	--	--	0.20	--		96
6S/10E-28K 1 M 9-16-63	5524	64	--	685	--	--	106 4.61	--	--	--	--	60 1.69	--	--	0.10	--		116
6S/11E- 3B 1 M 9-29-63	5524	65	--	652	--	--	60 2.61	--	--	--	--	28 0.79	--	--	0.00	--		190
6S/11E- 9C 1 M 9-13-63	5524	66	--	520	--	--	41 1.78	--	--	--	--	19 0.54	--	--	0.00	--		169
6S/12E- 6L 1 M 9-17-63	5524	67	--	483	--	--	36 1.57	--	--	--	--	21 0.59	--	--	0.10	--		147

TABLE E-1

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral constituents in parts per million / equivalents per million / percent reactance value: Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Mineral constituents in parts per million: Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
SAN JOAQUIN VALLEY MERCED IRRIGATION DIST					52200	52209												
6S/11E-27K 1 M 7- 1-63	5525	68	--	228	--	--	21 0.91	--	--	--	--	5 0.14	--	--	0.00	--		62
6S/11E-36P 1 M 7- 9-63	5525	67	--	308	--	--	26 1.13	--	--	--	--	7 0.20	--	--	0.00	--		91
6S/12E-21N 1 M 7- 9-63	5525	68	--	228	--	--	20 0.87	--	--	--	--	4 0.11	--	--	0.00	--		66
7S/11E- 4M 1 M 7- 2-63	5525	67	--	518	--	--	67 2.91	--	--	--	--	21 0.59	--	--	0.10	--		105
7S/12E- 1Q 1 M 9-10-63	5525	68	--	361	--	--	26 1.13	--	--	--	--	14 0.39	--	--	0.00	--		119
7S/12E-19A 1 M 6-20-63	5525	66	--	326	--	--	22 0.96	--	--	--	--	5 0.14	--	--	0.00	--		116
7S/13E- 4P 1 M 7- 9-63	5525	68	--	330	--	--	24 1.04	--	--	--	--	9 0.25	--	--	0.00	--		110
7S/13E-22C 1 M 7-23-63	5525	66	--	416	--	--	21 0.91	--	--	--	--	72 2.03	--	--	0.00	--		171
7S/14E- 9R 1 M 9-10-63	5525	69	--	267	--	--	21 0.91	--	--	--	--	9 0.25	--	--	0.00	--		91

* TDS by Evap at 105°c

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
MERCED IRRIGATION DIST						52209	(CONTINUED)											
7S/14E-31M 1 M 8- 8-63	5525	68	--	670	--	--	46 2.00	--	--	--	--	18 0.51	--	--	0.00	--		264
7S/15E-18K 1 M 8- 7-63	5525	70	--	278	--	--	18 0.78	--	--	--	--	8 0.23	--	--	0.00	--		101
7S/15E-30E 1 M 8- 7-63	5525	66	--	676	--	--	57 2.48	--	--	--	--	13 0.37	--	--	0.00	--		223
8S/14E- 2D 1 M 8-21-63	5525	69	--	325	--	--	31 1.35	--	--	--	--	8 0.23	--	--	0.00	--		96
DELTA-MENDOTA AREA						52211												
3S/ 7E-33C 1 M 7-12-63	5122	72	--	1060	--	--	142 6.17	--	--	--	--	215 6.06	--	--	0.20	--		170
4S/ 7E-17K 1 M 6-27-63	5050	63	--	1570	--	--	154 6.70	--	--	--	--	288 8.12	--	--	2.00	--		412
4S/ 7E-18A 1 M 6-27-63	5050	62	--	1750	--	--	178 7.74	--	--	--	--	289 8.15	--	--	2.30	--		478
4S/ 7E-26R 1 M 7-17-63	5050	67	8.3	1190	30 1.50 10	111 9.13 61	99 4.30 29	2 0.05	3 0.10 1	284 4.65 31	230 4.79 31	190 5.36 35	20.0 0.32 2	0.2	0.60	21	846 876	532
4S/ 7E-34K 1 M 7-17-63	5050	68	8.3	1350	20 1.00 7	95 7.81 57	110 4.78 35	2 0.05	0	270 4.43 32	126 2.62 19	224 6.32 46	23.0 0.37 3	0.2	0.60	27	761 821	441

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number / Date sampled	Agy. Call.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million, equivalents per million, percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200																		
DELTA-MENDOTA AREA 52211 (CONTINUED)																		
5S/ 7E- 1M 1 M 7-17-63	5050	66	8.4	1220	52 2.59 18	100 8.22 56	85 3.70 25	2 0.05	12 0.40 3	306 5.02 35	152 3.16 22	202 5.70 39	14.0 0.23 2	0.2	0.60	20	790 816	541
5S/ 7E- 9H 1 M 7-17-63	5050	73	8.2	1590	49 2.45 15	70 5.76 36	180 7.83 49	2 0.05	0	195 3.20 20	235 4.89 31	271 7.64 48	3.9 0.06	0.2	0.60	17	925 974	411
5S/ 7E-23B 1 M 7-17-63	5050	74	8.2	1340	69 3.44 24	66 5.43 37	130 5.65 39	3 0.08 1	0	195 3.20 22	272 5.66 39	190 5.36 37	11.0 0.18 1	0.1	0.30	23	860 870	444
5S/ 7E-35A 1 M 6-27-63	5050	64	8.4	940	28 1.40 14	50 4.11 42	97 4.22 43	1 0.03	6 0.20 2	211 3.46 36	98 2.04 21	128 3.61 38	11.0 0.18 2	0.4	0.40	23	547 544	276
5S/ 8E- 8G 1 M 8- 5-63	5122	70	--	1750	--	--	154 6.70	--	--	--	--	181 5.10	--	--	0.80	--		602
5S/ 8E-27M 1 M 8- 5-63	5122	73	--	1370	--	--	129 5.61	--	--	--	--	42 1.18	--	--	0.50	--		450
8S/ 9E- 2P M 6-27-63	5050	65	8.1	993	74 3.69 37	32 2.63 26	85 3.70 37	2 0.05	0	167 2.74 27	247 5.14 50	77 2.17 21	12.0 0.19 2	0.1	0.48	27	639 684	316
8S/ 9E-12E 1 M 7-23-63	5641	--	8.2	2275	82 4.09 17	39 3.21 13	385 16.74 69	8 0.20 1	0	162 2.66 11	559 11.64 48	347 9.79 41	0.0	0.2	2.20	27	1529 1550	365
8S/10E-29D 1 M 6-27-63	5050	67	8.2	2280	65 3.24 14	27 2.22 10	390 16.96 75	3 0.08	0	171 2.80 13	548 11.41 52	273 7.70 35	2.3 0.04	0.3	3.00	35	1431 1500	273

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200																		
DELTA-MENDOTA AREA 52211 (CONTINUED)																		
8S/10E-29D 1 M 7-17-63	5050	76	8.2	1875	68 3.39 16	19 1.56 7	370 16.09 76	3 0.08	0	187 3.06 15	524 10.91 52	245 6.91 33	1.3 0.02	0.2	2.20	28	1353 1340	248
9S/ 9E- 2L 1 M 7-23-63	5641	--	8.3	2050	68 3.39 15	71 5.84 25	315 13.70 60	2 0.05	5 0.17 1	205 3.36 15	408 8.49 38	374 10.55 47	0.0	0.2	1.80	19	1365 1400	462
9S/ 9E-21F 1 M 7-23-63	5641	--	--	927	--	--	97 4.22	--	--	--	--	112 3.16	--	--	1.30	--		251
9S/10E-36R 1 M 7-22-63	5641	--	--	1080	--	--	80 3.48	--	--	--	--	116 3.27	--	--	0.60	--		379
9S/11E- 7N 1 M 6-27-63	5050	65	8.2	1730	27 1.35 8	4 0.33 2	332 14.44 89	2 0.05	0	209 3.43 21	460 9.58 58	129 3.64 22	0.8 0.01	0.3	2.80	22	1083 1090	84
10S/ 9E- 2D 1 M 6-27-63	5050	64	8.2	970	30 1.50 14	19 1.56 15	170 7.39 70	2 0.05	0	207 3.39 32	70 1.46 14	197 5.56 53	2.7 0.04	0.2	1.40	16	610 564	153
CHOWCHILLA WATER DISTRICT 52212																		
9S/16E-30C 1 M 8- 7-63	5050	74	--	207	--	--	17 0.74	--	--	--	--	18 0.51	--	--	0.00	--		61
9S/16E-35N 1 M 8- 7-63	5050	72	8.1	285	28 1.40 45	6 0.49 16	27 1.17 38	2 0.05 2	0	127 2.08 71	4 0.08 3	25 0.71 24	4.4 0.07 2	0.1	0.00	39	198 192	95
10S/14E- 8B 1 M 8-15-63	5050	67	--	533	--	--	38 1.65	--	--	--	--	35 0.99	--	--	0.10	--		176

" TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY CHOWCHILLA WATER DISTRICT					52200	52212	(CONTINUED)											
10S/15E-31A 1 M 8-15-63	5050	68	--	772	--	--	43 1.87	--	--	--	--	120 3.38	--	--	0.10	--		268
10S/16E-30K 1 M 8-28-63	5050	70	8.2	320	31 1.55 45	8 0.66 19	28 1.22 35	2 0.05 1	0	153 2.51 74	4 0.08 2	22 0.62 18	9.7 0.16 5	0.2	0.10	34	214 216	111
MADERA IRRIGATION DIST						52213												
11S/16E-22K 1 M 8-26-63	5050	69	--	460	--	--	30 1.30	--	--	--	--	32 0.90	--	--	0.00	--		158
11S/17E-25B 1 M 8- 7-63	5050	72	--	205	--	--	20 0.87	--	--	--	--	18 0.51	--	--	0.00	--		53
11S/18E-20E 1 M 8- 7-63	5050	75	7.8	180	15 0.75 39	2 0.16 8	21 0.91 47	4 0.10 5	0	79 1.29 69	3 0.06 3	17 0.48 26	2.6 0.04 2	0.2	0.00	54	158 160	46
12S/17E- 7F 1 M 8-26-63	5050	69	--	401	--	--	28 1.22	--	--	--	--	25 0.71	--	--	0.10	--		127
12S/17E-24A 1 M 8- 7-63	5050	69	8.1	250	24 1.20 46	6 0.49 19	19 0.83 32	4 0.10 4	0	116 1.90 74	4 0.08 3	16 0.45 18	7.8 0.13 5	0.2	0.10	52	190 196	85
12S/18E- 7L 1 M 8- 7-63	5050	68	--	202	--	--	16 0.70	--	--	--	--	10 0.28	--	--	0.00	--		61
- 7L 1 M 8-28-63	5050	68	--	204	--	--	15 0.65	--	--	--	--	10 0.28	--	--	0.00	--		61

* TDS by Evap at 105°c

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
MADERA IRRIGATION DIST						52213	(CONTINUED)											
12S/18E-14J 1 M 8- 7-63	5050	73	--	273	--	--	22 0.96	--	--	--	--	26 0.73	--	--	0.00	--		77
-14J 1 M 8-28-63	5050	72	--	274	--	--	22 0.96	--	--	--	--	26 0.73	--	--	0.00	--		76
13S/17E- 1L 1 M 9- 3-63	5000	71	7.4	237	17 0.85 37	5 0.41 18	22 0.96 42	2 0.05 2	0	92 1.51 47	44 0.92 29	23 0.65 20	8.1 0.13 4	0.3	0.00	77	244 204	63
13S/17E- 5P 1 M 8-15-63	5050	75	--	718	--	--	67 2.91	--	--	--	--	50 1.41	--	--	0.20	--		226
WEST CHOWCHILLA-MADERA						52214												
10S/13E- 1A 1 M 7-23-63	5641	--	8.0	490	60 2.99 54	9 0.74 13	39 1.70 31	5 0.13 2	0	223 3.65 67	14 0.29 5	38 1.07 20	27.0 0.44 8	0.1	0.00	49	351 366	187
11S/14E- 5B 1 M 8-15-63	5050	68	8.0	610	69 3.44 56	12 0.99 16	36 1.57 26	4 0.10 2	0	110 1.80 29	17 0.35 6	142 4.00 65	3.2 0.05 1	0.1	0.10	57	394 412	222
11S/14E-16A 1 M 9-11-63	5050	70	8.2	655	54 2.69 43	21 1.73 28	40 1.74 28	4 0.10 2	0	137 2.25 37	6 0.12 2	126 3.55 58	11.0 0.18 3	0.1	0.00	55	384 402	221
11S/15E-23L 1 M 8-26-63	5050	69	--	422	--	--	31 1.35	--	--	--	--	22 0.62	--	--	0.00	--		144
11S/15E-29H 1 M 8-15-63	5050	68	--	460	--	--	35 1.52	--	--	--	--	40 1.13	--	--	0.10	--		148

ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY WEST CHOWCHILLA-MADERA					52200	52214	(CONTINUED)											
12S/14E-10N 1 M 8-19-63	5050	67	--	2950	--	--	308 13.39	--	--	--	--	756 21.32	--	--	0.10	--		742
12S/15E- 4K 1 M 8-15-63	5050	68	--	585	--	--	37 1.61	--	--	--	--	80 2.26	--	--	0.00	--		194
12S/15E-22F 1 M 8-15-63	5050	69	--	353	--	--	32 1.39	--	--	--	--	25 0.71	--	--	0.00	--		96
12S/15E-27G 1 M 8-15-63	5050	71	--	381	--	--	55 2.39	--	--	--	--	32 0.90	--	--	0.00	--		101
13S/15E-22J 1 M 7-22-63	5641	--	--	208	--	--	46 2.00	--	--	--	--	12 0.34	--	--	0.20	--		3
13S/15E-25C 1 M 7-22-63	5050	--	--	201	--	--	44 1.91	--	--	--	--	16 0.45	--	--	0.10	--		2
-25C 1 M 8-19-63	5050	64	--	192	--	--	40 1.74	--	--	--	1 0.02	15 0.42	--	--	0.20	--		
13S/16E- 2C 2 M 8-15-63	5050	71	--	395	--	--	31 1.35	--	--	--	--	19 0.54	--	--	0.00	--		130

* TDS by Evap at 105°c

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number / Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO IRRIGATION DIST					52200	52215												
12S/20E-32J 1 M 5- 2-63	5050	--	7.9	228	21 1.05 43	8 0.66 27	15 0.65 27	3 0.08 3	0	134 2.20 86	3 0.06 2	7 0.20 8	6.9 0.11 4	0.3	0.25	61	191 208	86
12S/21E-31P 1 M 7-11-63	5631	--	--	344	--	--	13 0.57	--	--	--	--	5 0.14	--	--	0.00	--		146
13S/17E-12J 1 M 9-26-63	5050	--	8.3	600	51 2.54 39	20 1.64 25	53 2.30 35	3 0.08 1	0	304 4.98 77	43 0.90 14	16 0.45 7	9.5 0.15 2	--	0.20	--	345 385	209
13S/17E-22B 1 M 6-25-63	5631	--	7.6	747	59 2.94 38	18 1.48 19	76 3.30 42	2 0.05 1	0	372 6.10 77	42 0.87 11	21 0.59 7	25.0 0.40 5	0.1	0.16	59	485 467	221
13S/17E-29L 1 M 6-20-63	5631	--	8.0	576	28 1.40 26	10 0.82 15	70 3.04 56	5 0.13 2	0	209 3.43 62	35 0.73 13	49 1.38 25	0.4 0.01	0.2	0.12	60	360 370	111
13S/19E-24Q 1 M 6-12-63	5050	78	7.2	990	60 2.99 33	26 2.14 23	88 3.83 42	8 0.20 2	0	116 1.90 21	10 0.21 2	225 6.35 69	43.0 0.69 8	0.3	0.25	82	600 693	257
13S/19E-27L 1 M 8-12-63	5000	--	7.4	385	34 1.70 42	15 1.23 31	22 0.96 24	5 0.13 3	0	201 3.29 82	11 0.23 6	10 0.28 7	12.0 0.19 5	0.2	0.00	70	278	147
13S/19E-29E 1 M 7-17-63	5050	--	7.7	311	30 1.50 49	8 0.66 21	18 0.78 25	5 0.13 4	0	141 2.31 77	6 0.12 4	13 0.37 12	13.0 0.21 7	0.2	0.06	102	265 237	108
13S/19E-32D 1 M 6-13-63	5050	--	7.4	356	26 1.30 37	14 1.15 33	21 0.91 26	5 0.13 4	0	157 2.57 74	9 0.19 6	15 0.42 12	17.0 0.27 8	0.2	0.07	73	257 262	123

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO IRRIGATION DIST					52200	52215	(CONTINUED)											
13S/19E-32M 1 M 8-12-63	5000	--	7.5	832	50 2.50 28	21 1.73 19	105 4.57 51	6 0.15 2	0	373 6.11 71	27 0.56 7	50 1.41 16	31.0 0.50 6	0.3	0.20	62	536	212
13S/19E-36E 1 M 5-28-63	5050	72	8.0	281	16 0.80 36	8 0.66 30	14 0.61 28	5 0.13 6	0	108 1.77 84	3 0.06 3	4 0.11 5	10.0 0.16 8	0.2	0.05	73	186 180	73
13S/20E- 6F 1 M 6-11-63	5050	71	8.0	212	21 1.05 48	5 0.41 19	15 0.65 30	3 0.08 4	0	104 1.70 82	3 0.06 3	7 0.20 10	7.1 0.11 5	0.4	0.28	56	169 199	73
- 6F 1 M 6-11-63	5050	71	--	--	--	--	--	--	--	--	--	--	11.0 0.18	--	--	--		
13S/20E- 9F 2 M 3-23-63	5060	--	8.0	--	16 0.80 36	10 0.82 37	12 0.52 23	3 0.08 4	0	102 1.67 78	4 0.08 4	7 0.20 9	11.1 0.18 8	0.1	--	--	113	81
- 9F 2 M 5-28-63	5050	71	--	--	--	--	--	--	--	--	--	--	12.0 0.19	--	--	--		
13S/20E- 9Q 1 M 5-28-63	5050	71	8.1	206	19 0.95 39	10 0.82 34	13 0.57 24	3 0.08 3	0	118 1.93 84	4 0.08 3	5 0.14 6	9.6 0.15 7	0.2	0.06	69	191 182	89
- 9Q 1 M 8- 2-63	5050	--	--	--	--	--	--	--	--	--	--	--	12.0 0.19	--	--	--		
13S/20E-12L 1 M 6-14-63	5050	--	7.8	155	14 0.70 45	5 0.41 26	9 0.39 25	2 0.05 3	0	80 1.31 86	5 0.10 7	4 0.11 7	0.8 0.01 1	0.2	0.02	23	102 86	56

* TDS by Evap at 105°c

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million, equivalents per million, percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO IRRIGATION DIST					52200	52215	(CONTINUED)											
13S/20E-17G 1 M 9- 3-63	5060	--	7.7	--	19 0.95 39	10 0.82 34	13 0.57 23	4 0.10 4	0	120 1.97 85	5 0.10 4	5 0.14 6	7.1 0.11 5	0.1	--	--	122	89
13S/20E-17G 2 M 9- 3-63	5060	--	8.2	--	33 1.65 46	13 1.07 30	17 0.74 21	5 0.13 4	--	172 2.82 81	8 0.17 5	8 0.23 7	15.9 0.26 7	0.1	--	--	185 248	136
13S/20E-20N 1 M 6-26-63	5050	70	7.7	194	16 0.80 41	7 0.58 30	11 0.48 24	4 0.10 5	0	93 1.52 81	3 0.06 3	5 0.14 7	10.0 0.16 9	0.1	0.06	68	170 168	69
13S/20E-27J 1 M 6-26-63	5050	--	7.8	233	18 0.90 38	9 0.74 31	15 0.65 27	4 0.10 4	0	108 1.77 77	7 0.15 7	5 0.14 6	14.0 0.23 10	0.1	0.16	65	190 182	82
13S/20E-32D 1 M 6-26-63	5050	70	7.7	239	16 0.80 35	9 0.74 32	14 0.61 27	6 0.15 7	0	86 1.41 72	4 0.08 4	7 0.20 10	16.0 0.26 13	0.2	0.04	74	188 198	77
13S/21E-15N 2 M 5-16-63	5050	--	7.9	152	8 0.40 27	6 0.49 34	12 0.52 36	2 0.05 3	0	76 1.25 86	4 0.08 6	2 0.06 4	3.7 0.06 4	0.2	0.04	45	120 114	45
13S/21E-17F 1 M 5-16-63	5050	71	7.9	254	17 0.85 35	10 0.82 33	16 0.70 29	3 0.08 3	0	106 1.74 73	12 0.25 11	7 0.20 8	11.0 0.18 8	0.2	0.03	62	190 177	84
-17F 1 M 5-16-63	5050	--	--	--	--	--	--	--	--	--	--	--	17.0 0.27	--	--	--		
13S/21E-19A 1 M 5-29-63	5050	--	7.5	230	14 0.70 31	10 0.82 36	14 0.61 27	5 0.13 6	0	111 1.82 82	11 0.23 10	3 0.08 4	5.2 0.08 4	0.2	0.04	68	185 174	76

* TDS by Evap at 105°C

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200 FRESNO IRRIGATION DIST 52215 (CONTINUED)																		
13S/21E-19A 1 M 5-29-63	5050	--	--	--	--	--	--	--	--	--	--	--	7.0 0.11	--	--	--		
13S/21E-31E 2 M 5- 2-63	5050	73	--	--	--	--	--	--	--	--	--	--	21.0 0.34	--	--	--		
-31E 2 M 10-29-63	5050	--	7.4	393	28 1.40 36	17 1.40 36	24 1.04 26	4 0.10 3	0	178 2.92 75	13 0.27 7	13 0.37 10	20.0 0.32 8	0.1	0.09	57	264 272	140
13S/21E-31M 1 M 6-12-63	5050	--	8.2	572	47 2.35 39	26 2.14 35	31 1.35 22	10 0.26 4	0	245 4.02 67	38 0.79 13	19 0.54 9	39.0 0.63 11	0.3	0.15	73	404 407	225
13S/21E-31Q 1 M 5-27-63	5050	72	--	--	--	--	--	--	--	--	--	--	16.0 0.26	--	--	--		
-31Q 1 M 6-24-63	5060	--	8.1	--	49 2.45 40	27 2.22 37	28 1.22 20	7 0.18 3	0	283 4.64 77	27 0.56 9	18 0.51 8	22.0 0.35 6	--	--	--	317	234
13S/21E-36R 1 M 8-20-63	5050	68	7.8	173	9 0.45 29	6 0.49 32	13 0.57 37	1 0.03 2	0	73 1.20 84	6 0.12 8	3 0.08 6	1.9 0.03 2	0.1	0.00	44	120	47
13S/22E-28C 2 M 7-11-63	5631	--	8.1	467	23 1.15 24	32 2.63 56	20 0.87 18	3 0.08 2	0	210 3.44 74	12 0.25 5	20 0.56 12	25.0 0.40 9	0.2	0.10	48	287 288	189
13S/23E-30J 1 M 7-19-63	5631	--	7.8	232	14 0.70 30	6 0.49 21	25 1.09 46	3 0.08 3	0	112 1.84 80	6 0.12 5	6 0.17 7	9.7 0.16 7	0.3	0.08	62	187 184	60

* TDS by Evap at 105°c

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million, equivalents per million, percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200																		
FRESNO IRRIGATION DIST 52215 (CONTINUED)																		
14S/17E-13H 1 M 6-25-63	5631	--	8.0	444	38 1.90 47	14 1.15 28	20 0.87 21	5 0.13 3	0	143 2.34 57	16 0.33 8	42 1.18 29	15.0 0.24 6	0.2	0.08	69	290 311	153
14S/18E-11F 1 M 8-28-63	5000	69	8.0	560	30 1.50 27	24 1.97 36	43 1.87 34	6 0.15 3	0	212 3.47 64	24 0.50 9	38 1.07 20	23.0 0.37 7	0.2	0.15	75	368 371	174
14S/18E-16Q 1 M 8-12-63	5000	71	7.3	471	42 2.10 44	20 1.64 34	20 0.87 18	7 0.18 4	0	170 2.79 60	16 0.33 7	45 1.27 27	16.0 0.26 6	0.3	0.10	75	325	187
14S/18E-24D 1 M 8-12-63	5000	71	7.7	339	29 1.45 42	13 1.07 31	18 0.78 22	7 0.18 5	0	154 2.52 74	6 0.12 4	17 0.48 14	17.0 0.27 8	0.2	0.00	76	259	126
14S/18E-25A 1 M 6-12-63	5050	68	8.0	450	38 1.90 41	16 1.32 29	29 1.26 27	6 0.15 3	0	193 3.16 70	11 0.23 5	33 0.93 21	13.0 0.21 5	0.3	0.20	64	305 293	161
14S/18E-26N 1 M 8-13-63	5050	--	--	559	--	--	41 1.78	--	--	--	--	60 1.69	--	--	0.10	--		175
14S/18E-29J 1 M 8-12-63	5000	70	7.5	500	39 1.95 37	18 1.48 28	37 1.61 31	7 0.18 3	0	240 3.93 76	14 0.29 6	24 0.68 13	15.0 0.24 5	0.2	0.00	63	335	172
14S/19E- 7M 1 M 6-13-63	5050	--	8.0	503	44 2.20 41	21 1.73 32	30 1.30 24	7 0.18 3	0	276 4.52 86	9 0.19 4	13 0.37 7	12.0 0.19 4	0.1	0.04	74	346 318	197
14S/19E-14P 1 M 6-13-63	5050	--	7.4	261	12 0.60 24	7 0.58 23	28 1.22 49	3 0.08 3	0	104 1.70 71	9 0.19 8	8 0.23 10	16.0 0.26 11	0.1	0.08	47	181 179	59

State well number Date sampled	Agy. Call	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million equivalents per million percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO IRRIGATION DIST					52200	52215	(CONTINUED)											
14S/19E-20H 2 M 6-26-63	5050	--	8.2	1080	94 4.69 39	28 2.30 19	112 4.87 40	9 0.23 2	0	585 9.59 80	22 0.46 4	54 1.52 13	27.0 0.44 4	0.1	0.34	58	692 670	350
-20H 2 M 6-26-63	5050	--	--	--	--	--	--	--	--	--	--	--	32.0 0.52	--	--	--		
14S/19E-20K 2 M 6-12-63	5050	--	7.5	1140	108 5.39 43	53 4.36 35	55 2.39 19	13 0.33 3	0	648 10.62 84	18 0.37 3	58 1.64 13	0.7 0.01	0.1	0.11	70	695 677	488
-20K 2 M 6-12-63		--	--	--	--	--	--	--	--	--	--	--	0.5 0.01	--	--	--		
14S/19E-20M 2 M 6-12-63	5050	--	7.7	331	24 1.20 37	11 0.90 28	22 0.96 30	7 0.18 6	0	134 2.20 70	8 0.17 5	19 0.54 17	15.0 0.24 8	0.1	0.07	74	246 250	105
-20M 2 M 6-12-63	5050	--	--	--	--	--	--	--	--	--	--	--	20.0 0.32	--	--	--		
14S/19E-22R 1 M 6-26-63	5050	--	8.3	623	54 2.69 41	23 1.89 29	42 1.83 28	7 0.18 3	0	314 5.15 78	15 0.31 5	29 0.82 12	18.0 0.29 4	0.1	0.09	64	406 388	229
14S/19E-28P 1 M 6-26-63	5050	68	8.0	1040	98 4.89 47	32 2.63 25	61 2.65 25	13 0.33 3	0	474 7.77 77	21 0.44 4	66 1.86 18	3.9 0.06 1	0.1	0.14	73	601 603	376
14S/19E-29A 1 M 6-26-63	5050	65	8.2	928	74 3.69 36	41 3.37 33	68 2.96 29	11 0.28 3	0	527 8.64 84	14 0.29 3	49 1.38 13	0.8 0.01	0.1	0.27	67	584 565	353

* TDS by Evap at 105°c

TABLE E-1

ANALYSES OF GROUND WATER

1963

State well number: Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200																		
FRESNO IRRIGATION DIST 52215 (CONTINUED)																		
14S/19E-31A 1 M 6-12-63	5050	69	7.3	851	78 3.89 42	41 3.37 36	41 1.78 19	10 0.26 3	0	368 6.03 66	9 0.19 2	94 2.65 29	14.0 0.23 3	0.2	0.09	68	536 590	363
14S/20E- 1J 1 M 10-29-63	5050	--	7.5	276	20 1.00 36	12 0.99 35	17 0.74 26	3 0.08 3	0	130 2.13 78	6 0.12 4	7 0.20 7	18.0 0.29 11	0.1	0.06	40	187 196	100
14S/20E- 7M 1 M 6-26-63	5050	69	7.9	237	22 1.10 47	9 0.74 31	10 0.43 18	3 0.08 3	0	83 1.36 61	14 0.29 13	5 0.14 6	28.0 0.45 20	0.1	0.06	55	187 182	92
14S/20E-13K 1 M 5-28-63	5050	68	8.1	250	20 1.00 40	10 0.82 33	14 0.61 25	2 0.05 2	0	123 2.02 83	10 0.21 9	2 0.06 2	8.2 0.13 5	0.2	0.06	58	185 180	91
-13K 1 M 5-28-63	5050	--	--	--	--	--	--	--	--	--	--	--	9.2 0.15	--	--	--		
14S/20E-19A 1 M 7-17-63	5050	--	7.7	672	81 4.04 59	18 1.48 22	27 1.17 17	7 0.18 3	0	283 4.64 69	18 0.37 5	48 1.35 20	25.0 0.40 6	0.2	0.08	74	437 437	276
14S/20E-27C 1 M 6-13-63	5050	--	8.3	749	67 3.34 38	34 2.80 32	55 2.39 28	6 0.15 2	0	454 7.44 88	10 0.21 2	25 0.71 8	4.5 0.07 1	0.2	0.15	59	484 482	307
14S/20E-34R 2 M 8-22-63	5000	--	8.1	511	42 2.10 41	21 1.73 34	27 1.17 23	4 0.10 2	0	212 3.47 68	10 0.21 4	40 1.13 22	16.0 0.26 5	0.2	0.05	36	300 303	192
14S/21E- 3J 1 M 8- 8-63	5000	67	7.5	167	12 0.60 35	8 0.66 38	10 0.43 25	1 0.03 2	0	80 1.31 79	4 0.08 5	3 0.08 5	11.0 0.18 11	0.2	0.40	41	130	63

* TDS by Evap at 105°C

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200 FRESNO IRRIGATION DIST 52215 (CONTINUED)																		
14S/21E- 4N 1 M 5-27-63	5050	68	--	--	--	--	--	--	--	--	--	--	5.0 0.08	--	--	--		
- 4N 1 M 6-24-63	5060	--	8.1	--	22 1.10 38	13 1.07 37	15 0.65 23	2 0.05 2	0	153 2.51 85	6 0.12 4	8 0.23 8	5.5 0.09 3	0.1	--	--	147	109
14S/21E- 6B 3 M 6-12-63	5050	75	8.1	261	21 1.05 37	12 0.99 34	18 0.78 27	2 0.05 2	0	142 2.33 83	9 0.19 7	6 0.17 6	7.4 0.12 4	0.3	0.18	53	199 186	102
14S/21E- 6E 1 M 5-16-63	5050	73	--	--	--	--	--	--	--	--	--	--	26.0 0.42	--	--	--		
- 6E 1 M 10-29-63	5050	--	7.5	359	26 1.30 35	16 1.32 36	22 0.96 26	4 0.10 3	0	169 2.77 78	9 0.19 5	11 0.31 9	16.0 0.26 7	0.1	0.06	63	250 261	131
14S/21E- 7M 1 M 5- 1-63	5050	72	--	--	--	--	--	--	--	--	--	--	18.0 0.29	--	--	--		
14S/21E- 9R 1 M 5-28-63	5050	71	8.3	452	39 1.95 40	21 1.73 36	25 1.09 23	2 0.05 1	0	219 3.59 77	15 0.31 7	15 0.42 9	21.0 0.34 7	0.1	0.05	47	293 276	184
- 9R 1 M 5-28-63	5050	--	--	--	--	--	--	--	--	--	--	--	20.0 0.32	--	--	--		
14S/21E-12P 1 M 6-27-63	5050	--	8.2	780	94 4.69 56	25 2.06 24	36 1.57 19	4 0.10 1	0	351 5.75 68	80 1.67 20	28 0.79 9	18.0 0.29 3	0.0	0.07	51	509 494	338

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
FRESNO IRRIGATION DIST						52215 (CONTINUED)												
14S/21E-30N 1 M 6-13-63	5050	--	7.9	381	31 1.55 40	16 1.32 34	21 0.91 24	3 0.08 2	0	162 2.66 70	7 0.15 4	24 0.68 18	19.0 0.31 8	0.3	0.24	40	241 250	144
-30N 1 M 6-13-63	5050	--	--	--	--	--	--	--	--	--	--	--	20.0 0.32	--	--	--		
15S/19E-15C 1 M 8-14-63	5000	68	7.6	758	78 3.89 48	21 1.73 21	50 2.17 27	13 0.33 4	0	331 5.43 68	32 0.67 8	56 1.58 20	16.0 0.26 3	0.1	0.00	70	499	281
15S/20E- 6L 1 M 8-14-63	5000	67	7.8	584	49 2.45 39	24 1.97 31	42 1.83 29	3 0.08 1	0	288 4.72 75	17 0.35 6	27 0.76 12	29.0 0.47 7	0.3	0.20	50	383	221
CITY OF FRESNO						52216												
13S/20E-34M 1 M 5- 1-63	5050	71	7.7	281	19 0.95 37	9 0.74 28	18 0.78 30	5 0.13 5	0	122 2.00 80	6 0.12 5	7 0.20 8	12.0 0.19 8	0.2	0.05	68	204 192	85
14S/20E- 1J 1 M 5- 1-63	5050	70	--	--	--	--	--	--	--	--	--	--	21.0 0.34	--	--	--		
14S/20E- 2J 1 M 5-15-63	5050	--	7.6	430	34 1.70 39	17 1.40 32	26 1.13 26	6 0.15 3	0	205 3.36 79	11 0.23 5	14 0.39 9	18.0 0.29 7	0.2	0.08	67	294 286	155
14S/20E- 3M 1 M 6-13-63	5050	74	7.9	395	32 1.60 41	14 1.15 29	24 1.04 26	6 0.15 4	0	173 2.84 73	8 0.17 4	17 0.48 12	24.0 0.39 10	0.2	0.13	77	287 260	138
14S/20E- 8A 1 M 7-16-63	5050	70	7.5	531	55 2.74 51	15 1.23 23	27 1.17 22	8 0.20 4	0	215 3.52 67	17 0.35 7	26 0.73 14	41.0 0.66 13	0.2	0.07	74	369 374	199

TDS by Evap at 105°C

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY CITY OF FRESNO					52200	52216	(CONTINUED)											
14S/20E-10M 2 M 5-15-63	5050	74	7.5	354	26 1.30 36	14 1.15 32	23 1.00 28	5 0.13 4	0	162 2.66 78	7 0.15 4	13 0.37 11	15.0 0.24 7	0.2	0.05	71	254	123
14S/20E-11F 1 M 5-14-63	5050	72	7.6	418	32 1.60 37	18 1.48 35	24 1.04 24	6 0.15 4	0	199 3.26 78	11 0.23 6	13 0.37 9	19.0 0.31 7	0.2	0.06	66	287 264	154
14S/20E-15M 1 M 5-16-63	5050	73	8.1	367	29 1.45 40	15 1.23 34	19 0.83 23	6 0.15 4	0	169 2.77 78	8 0.17 5	16 0.45 13	11.0 0.18 5	0.1	0.05	73	260 273	134
-15M 1 M 5-16-63	5050	--	--	--	--	--	--	--	--	--	--	--	17.0 0.27	--	--	--		
FRESNO SLOUGH AREA						52217												
13S/15E-34K 1 M 4- 4-63	5702	--	9.0	--	3 0.15	2 0.16	44 1.91	--	15 0.50	64 1.05	9 0.19	18 0.51	--	--	--	13	152	16
13S/16E-36R 1 M 8-14-63	5000	70	7.6	802	89 4.44 56	16 1.32 17	47 2.04 26	6 0.15 2	0	220 3.61 46	43 0.90 11	121 3.41 43	0.9 0.01	0.2	0.00	53	484	288
13S/16E-36R 3 M 8-14-63	5000	69	7.6	756	79 3.94 53	17 1.40 19	46 2.00 27	5 0.13 2	0	212 3.47 46	49 1.02 13	110 3.10 41	0.8 0.01	0.2	0.00	50	461	267
13S/17E-30A 2 M 8-28-63	5000	71	8.0	571	43 2.15 40	7 0.58 11	59 2.57 47	5 0.13 2	0	177 2.90 54	11 0.23 4	79 2.23 42	0.0	0.2	0.04	79	370 371	137
14S/15E- 3B 1 M 1-10-63	5702	--	8.7	--	9 0.45	--	--	--	--	89 1.46	34 0.71	96 2.71	--	--	--	--		23

* TDS by Evap at 105°c

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO SLOUGH AREA					52200	52217 (CONTINUED)												
14S/15E- 3B 1 M 2-27-63	5702	--	9.0	--	2 0.10	--	44 1.91	--	18 0.60	67 1.10	0	21 0.59	--	--	0.20	14	148	5
14S/15E- 3K 2 M 5- 3-63	5702	--	8.4	--	3 0.15	2 0.16	158 6.87	--	9 0.30	107 1.75	12 0.25	174 4.91	--	--	0.20	29	448	16
14S/16E- 6A 1 M 8-27-63	5000	68	8.1	765	2 0.10 1	0	154 6.70 98	1 0.03	0	184 3.02 43	1 0.02	142 4.00 57	0.5 0.01	0.4	0.18	50	441 447	5
14S/16E- 6C 1 M 8-12-63	5001	70	8.3	690	3 0.15 2	0	134 5.83 97	2 0.05 1	0	166 2.72 41	6 0.12 2	132 3.72 57	0.0	--	--	--	359	8
14S/16E- 7G 1 M 9-26-63	5000	--	7.5	1280	8 0.40 3	2 0.16 1	256 11.13 95	2 0.05	0	136 2.23 19	42 0.87 7	310 8.74 74	0.0	--	0.20	--	687 666	28
14S/16E-10J 1 M 8-12-63	5000	--	8.4	973	19 0.95 10	1 0.08 1	195 8.48 88	3 0.08 1	7 0.23 2	214 3.51 37	57 1.19 13	156 4.40 47	4.9 0.08 1	0.3	0.10	47	596	52
14S/16E-23M 1 M 8-12-63	5000	70	7.6	1100	45 2.25 21	6 0.49 5	178 7.74 73	5 0.13 1	0	228 3.74 36	34 0.71 7	211 5.95 57	0.6 0.01	0.2	0.40	52	644 644	137
15S/17E-10J 3 M 8-10-63	5000	74	8.1	1334	29 1.45 12	4 0.33 3	230 10.00 84	7 0.18 2	0	240 3.93 31	9 0.19 2	297 8.38 67	0.0	--	--	--	694	89
15S/17E-10R 1 M 8-12-63	5050	73	--	3410	--	--	334 14.52	--	--	--	--	1000 28.20	--	--	0.28	--		764

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO SLOUGH AREA					52200	52217	(CONTINUED)											
15S/17E-14G 1 M 8-22-63	5000	--	8.0	855	23 1.15 15	2 0.16 2	141 6.13 81	5 0.13 2	0	138 2.26 30	3 0.06 1	186 5.25 69	0.3	0.4	0.16	41	470 479	66
15S/17E-15E 1 M 8-10-63	5000	71	7.9	1033	43 2.15 23	8 0.66 7	148 6.44 68	7 0.18 2	0	251 4.11 42	28 0.58 6	183 5.16 52	2.5 0.04	--	--	--	543	141
15S/17E-16H 1 M 8-10-63	5000	73	7.8	1240	10 0.50 4	2 0.16 1	260 11.30 93	6 0.15 1	0	264 4.33 37	51 1.06 9	224 6.32 54	1.3 0.02	0.6	1.60	65	751	33
15S/17E-17A 1 M 9- 9-63	5000	72	7.9	820	7 0.35 5	1 0.08 1	166 7.22 93	4 0.10 1	0	195 3.20 42	5 0.10 1	152 4.29 56	1.8 0.03	0.5	0.75	62	496 501	22
15S/17E-17R 1 M 9- 9-63	5000	71	8.3	1210	18 0.90 8	3 0.25 2	235 10.22 89	4 0.10 1	0	279 4.57 41	28 0.58 5	215 6.06 54	1.3 0.02	0.5	1.50	55	698 711	58
15S/17E-21K 1 M 8-10-63	5000	71	8.1	931	14 0.70 8	2 0.16 2	172 7.48 88	6 0.15 2	0	199 3.26 36	73 1.52 17	153 4.31 47	0.6 0.01	--	--	--	518	43
15S/17E-34A 1 M 8-12-63	5050	75	--	481	--	--	96 4.17	--	--	--	--	53 1.49	--	--	0.46	--		15
15S/18E-16G 1 M 6-11-63	5631	--	--	377	--	--	27 1.17	--	--	--	8 0.17	27 0.76	--	--	0.07	--		113
15S/18E-36A 1 M 8-14-63	5000	71	8.0	340	25 1.25 35	7 0.58 16	36 1.57 44	7 0.18 5	0	153 2.51 73	11 0.23 7	18 0.51 15	13.0 0.21 6	0.2	0.00	59	251	92

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Call.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO SLOUGH AREA					52200	52217	(CONTINUED)											
15S/19E-22M 1 M 8-29-63	5000	--	8.0	547	54 2.69 50	12 0.99 18	36 1.57 29	7 0.18 3	0	198 3.25 61	26 0.54 10	51 1.44 27	5.7 0.09 2	0.2	0.07	47	336 342	184
15S/19E-28E 1 M 8-14-63	5000	74	7.6	286	19 0.95 32	4 0.33 11	34 1.48 50	7 0.18 6	0	120 1.97 69	9 0.19 7	17 0.48 17	13.0 0.21 7	0.3	0.00	66	228	64
15S/19E-35L 1 M 8-12-63	5050	76	7.5	916	68 3.39 39	8 0.66 8	103 4.48 52	6 0.15 2	0	246 4.03 47	59 1.23 14	92 2.59 30	49.0 0.79 9	0.1	0.10	32	538 563	203
16S/17E-10G 1 M 8-26-63	5050	66	8.0	670	32 1.60 24	3 0.25 4	110 4.78 72	2 0.05 1	0	308 5.05 73	64 1.33 19	19 0.54 8	0.3	0.1	0.08	38	420 426	93
16S/17E-12J 1 M 8-10-63	5000	68	8.1	429	30 1.50 35	3 0.25 6	58 2.52 59	1 0.03 1	0	199 3.26 73	26 0.54 12	24 0.68 15	0.0	--	--	--	240	88
16S/18E- 2C 1 M 8-14-63	5000	72	7.9	206	12 0.60 27	2 0.16 7	30 1.30 59	5 0.13 6	0	109 1.79 87	1 0.02 1	6 0.17 8	5.1 0.08 4	0.3	0.00	63	178	38
16S/18E- 4N 1 M 8-27-63	5000	72	7.5	172	5 0.25 15	0	32 1.39 81	3 0.08 5	0	92 1.51 90	3 0.06 4	4 0.11 7	0.1	0.4	0.02	68	161 172	13
16S/18E-10A 1 M 8-12-63	5050	78	7.6	177	10 0.50 28	1 0.08 5	25 1.09 62	4 0.10 6	0	95 1.56 90	2 0.04 2	4 0.11 6	1.4 0.02 1	0.3	0.03	39	133 137	29
16S/18E-15L 1 M 8-10-63	5000	71	8.1	169	13 0.65 38	1 0.08 5	22 0.96 56	1 0.03 2	0	88 1.44 84	5 0.10 6	6 0.17 10	0.0	--	--	--	91	37

* TDS by Evap at 105°

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO SLOUGH AREA					52200	52217 (CONTINUED)												
16S/18E-18A 1 M 8-27-63	5000	67	8.0	334	26 1.30 40	1 0.08 2	42 1.83 56	1 0.03 1	0	153 2.51 77	16 0.33 10	15 0.42 13	0.3	0.1	0.02	36	213 215	69
16S/18E-24A 1 M 8-10-63	5000	73	8.0	161	13 0.65 39	2 0.16 10	18 0.78 47	3 0.08 5	0	85 1.39 80	7 0.15 9	7 0.20 11	0.0	--	--	--	92	41
16S/18E-24J 1 M 8-10-63	5000	74	7.9	164	13 0.65 40	2 0.16 10	18 0.78 48	2 0.05 3	0	79 1.29 75	9 0.19 11	9 0.25 14	0.0	--	--	--	92	41
16S/18E-26A 2 M 8-29-63	5000	70	7.6	1150	77 3.84 36	2 0.16 1	154 6.70 62	2 0.05	0	143 2.34 22	130 2.71 26	196 5.53 52	0.6 0.01	0.1	0.08	31	663 679	200
16S/19E- 3Q 1 M 8-29-63	5000	73	7.9	464	47 2.35 55	4 0.33 8	35 1.52 35	4 0.10 2	0	117 1.92 45	24 0.50 12	50 1.41 33	24.0 0.39 9	0.1	0.06	31	277 287	134
16S/19E- 8R 1 M 8-14-63	5000	--	8.0	246	24 1.20 51	1 0.08 3	23 1.00 42	3 0.08 3	0	98 1.61 70	11 0.23 10	16 0.45 20	0.3	0.1	0.00	39	166	64
16S/19E-16C 1 M 8-14-63	5000	72	8.0	148	11 0.55 35	2 0.16 10	17 0.74 48	4 0.10 6	0	84 1.38 89	2 0.04 3	3 0.08 5	2.8 0.05 3	0.1	0.00	58	141	36
17S/19E- 1G 1 M 8-14-63	5000	71	7.5	303	22 1.10 40	1 0.08 3	36 1.57 56	1 0.03 1	0	84 1.38 51	17 0.35 13	33 0.93 35	1.9 0.03 1	0.2	0.05	41	194 196	59
17S/19E- 5J 1 M 6-14-63	5000	69	7.7	709	41 2.05 31	1 0.08 1	103 4.48 67	1 0.03	0	111 1.82 28	68 1.42 22	113 3.19 49	1.3 0.02	0.0	0.08	22	405 400	107

* TDS by Evap at 105°c

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY FRESNO SLOUGH AREA					52200	52217	(CONTINUED)											
17S/19E- 6F 1 M 8-14-63	5000	67	8.0	606	35 1.75 27	0	109 4.74 73	1 0.03	0	297 4.87 76	28 0.58 9	32 0.90 14	1.0 0.02	0.2	0.00	23	375	88
17S/19E- 7A 1 M 8-14-63	5000	69	8.2	495	9 0.45 9	2 0.16 3	95 4.13 86	2 0.05 1	0	206 3.38 65	7 0.15 3	60 1.69 32	0.6 0.01	--	--	--	277	31
17S/19E- 7D 1 M 8-14-63	5000	69	8.4	554	12 0.60 11	2 0.16 3	105 4.57 84	3 0.08 1	7 0.23 4	228 3.74 64	5 0.10 2	62 1.75 30	0.6 0.01	--	--	--	309	38
CONSOLIDATED IRRIG DIST						52218												
14S/21E-25R 1 M 9-26-63	5000	66	7.4	145	8 0.40 28	4 0.33 23	15 0.65 45	2 0.05 3	0	62 1.02 72	12 0.25 18	4 0.11 8	2.4 0.04 3	--	0.10	--	78 116	37
15S/21E-24L 1 M 8-12-63	5050	73	8.2	550	41 2.05 39	10 0.82 16	53 2.30 44	4 0.10 2	0	219 3.59 66	29 0.60 11	33 0.93 17	19.0 0.31 6	0.2	0.07	38	335 339	144
15S/22E-33G 1 M 8-21-63	5000	--	8.4	731	72 3.59 47	14 1.15 15	64 2.78 36	4 0.10 1	8 0.27 4	246 4.03 54	41 0.85 11	69 1.95 26	26.0 0.42 6	0.2	0.10	54	473	237
16S/20E-18G 1 M 8-16-63	5000	75	7.4	134	3 0.15 11	0	28 1.22 87	1 0.03 2	0	71 1.16 90	3 0.06 5	2 0.06 5	0.5 0.01 1	0.3	0.03	17	90	8
16S/23E- 8P 1 M 9-13-63	5000	67	7.8	327	30 1.50 48	8 0.66 21	21 0.91 29	3 0.08 3	0	127 2.08 67	21 0.44 14	10 0.28 9	19.0 0.31 10	--	0.00	--	174 223	108
17S/22E- 2H 1 M 7-10-63	5126	70	--	177	--	--	7 0.30	--	--	--	--	3 0.08	--	--	0.00	--		70

TABLE E-1

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY ALTA IRRIGATION DISTRICT					52200	52219												
15S/24E- 7Q 1 M 8-13-63	5000	68	7.5	385	37 1.85 47	14 1.15 29	20 0.87 22	2 0.05 1	0	168 2.75 70	16 0.33 8	14 0.39 10	27.0 0.44 11	0.2	0.00	62	275	150
15S/24E-31H 2 M 8-21-63	5000	--	7.8	341	30 1.50 43	10 0.82 23	26 1.13 32	2 0.05 1	0	158 2.59 75	20 0.42 12	5 0.14 4	20.0 0.32 9	0.4	0.50	55	247	116
16S/23E- 3F 2 M 8- 9-63	5000	--	7.4	572	52 2.59 41	20 1.64 26	45 1.96 31	4 0.10 2	0	298 4.88 78	40 0.83 13	11 0.31 5	13.0 0.21 3	0.2	0.00	51	383	212
16S/24E- 3J 1 M 6-17-63	5123	72	8.1	550	43 2.15 37	22 1.81 31	42 1.83 31	2 0.05 1	0	202 3.31 57	23 0.48 8	57 1.61 28	24.0 0.39 7	0.1	0.00	49	361 392	198
16S/25E-32N 2 M 5-28-63	5123	62	8.1	620	57 2.84 41	29 2.38 34	38 1.65 24	4 0.10 1	0	319 5.23 77	19 0.40 6	35 0.99 15	11.0 0.18 3	0.1	0.10	48	398 406	261
17S/23E- 8H 1 M 5-28-63	5123	68	--	1020	--	--	116 5.04	--	--	--	--	139 3.92	--	--	0.10	--		241
17S/23E- 8J 1 M 5-28-63	5123	68	--	1020	--	--	116 5.04	--	--	--	--	139 3.92	--	--	0.10	--		241
17S/24E-15A 2 M 6-24-63	5123	70	8.2	405	33 1.65 36	18 1.48 32	32 1.39 30	3 0.08 2	0	179 2.93 66	19 0.40 9	35 0.99 22	7.8 0.13 3	0.2	0.10	52	288 290	157

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million, equivalents per million, percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY LOWER KINGS RIVER AREA					52200	52220												
16S/21E-35P 1 M 8- 9-63	5000	69	7.9	482	51 2.54 52	10 0.82 17	34 1.48 30	3 0.08 2	0	190 3.11 64	19 0.40 8	36 1.02 21	22.0 0.35 7	0.2	0.00	37	306	168
17S/18E-12N 1 M 8-28-63	5000	66	8.1	1070	30 1.50 14	2 0.16 1	216 9.39 85	1 0.03	0	435 7.13 65	93 1.94 18	70 1.97 18	0.0	1.3	1.20	22	650 656	83
17S/18E-24J 1 M 8-28-63	5000	--	8.2	1170	7 0.35 3	0	246 10.70 97	1 0.03	0	307 5.03 46	50 1.04 9	174 4.91 45	0.7 0.01	1.3	0.98	19	651 665	18
17S/18E-35Q 1 M 8-26-63	5050	71	8.5	1090	35 1.75 14	11 0.90 7	225 9.78 78	1 0.03	13 0.43 4	304 4.98 41	235 4.89 40	68 1.92 16	0.0	0.6	1.40	17	756 744	133
17S/19E-27A 1 M 8-19-63	5000	70	8.8	435	2 0.10 2	0	91 3.96 98	0	14 0.47 10	159 2.61 58	22 0.46 10	35 0.99 22	0.0	--	--	--	242	5
17S/19E-34Q 1 M 8-19-63	5000	67	9.1	493	2 0.10 2	0	109 4.74 97	1 0.03 1	20 0.67 13	184 3.02 56	15 0.31 6	48 1.35 25	0.0	--	--	--	285	5
17S/20E- 2M 1 M 8-28-63	5000	--	7.5	307	18 0.90 33	0	41 1.78 66	1 0.03 1	0	71 1.16 43	20 0.42 16	37 1.04 39	4.4 0.07 3	0.2	0.06	24	181 186	45
17S/20E-13G 1 M 8-28-63	5000	71	7.4	150	2 0.10 7	0	33 1.43 93	0	0	78 1.28 85	2 0.04 3	5 0.14 9	2.6 0.04 3	0.2	0.06	20	103 106	5
17S/20E-22P 1 M 8-27-63	5000	66	7.8	275	4 0.20 7	0	61 2.65 92	1 0.03 1	0	149 2.44 87	13 0.27 10	4 0.11 4	0.0	0.1	0.04	18	174 179	10

* TDS by Evap at 105°c

TABLE E-1

ANALYSES OF GROUND WATER

1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY LOWER KINGS RIVER AREA					52200	52220	(CONTINUED)											
17S/20E-23D 1 M 8-27-63	5000	73	7.7	280	1 0.05 2	0	63 2.74 97	1 0.03 1	0	137 2.25 81	2 0.04 1	17 0.48 17	0.0	0.8	0.50	20	173 184	3
17S/21E- 7J 1 M 8-14-63	5000	73	9.2	160	2 0.10 7	0	32 1.39 93	0	15 0.50 34	38 0.62 42	3 0.06 4	9 0.25 17	3.4 0.05 3	0.2	0.00	18	101	5
17S/21E-17P 1 M 8-13-63	5000	--	7.7	209	32 1.60 76	2 0.16 8	8 0.35 17	0	0	79 1.29 63	34 0.71 34	1 0.03 1	1.9 0.03 1	0.2	0.00	26	144	88
17S/21E-23J 1 M 9-23-63	5000	--	7.6	754	66 3.29	8 0.66	98 4.26	2 0.05	0	420 6.88	26 0.54	15 0.42	--	--	0.00	--		198
18S/19E- 1B 1 M 8-14-63	5000	69	7.2	625	12 0.60 9	3 0.25 4	128 5.57 86	2 0.05 1	0	228 3.74 60	27 0.56 9	68 1.92 31	2.8 0.05 1	1.0	0.30	23	379	43
18S/19E- 1B 3 M 8-14-63	5000	71	8.6	782	5 0.25 3	0	173 7.52 96	1 0.03	20 0.67 9	224 3.67 47	75 1.56 20	68 1.92 25	0.0	0.5	0.50	19	472	13
18S/19E- 2F 2 M 8-23-63	5000	62	7.7	372	9 0.45 13	10 0.82 24	47 2.04 61	2 0.05 1	0	86 1.41 42	49 1.02 30	27 0.76 23	11.0 0.18 5	0.6	0.22	24	222 228	64
18S/19E- 2F 3 M 8-23-63	5126	67	8.3	486	2 0.10 2	0	104 4.52 97	1 0.03 1	0	215 3.52 75	5 0.10 2	38 1.07 23	0.4 0.01	1.2	0.58	27	285 296	5
18S/19E- 6G 1 M 7-30-63	5126	66	8.0	528	3 0.15 3	0	118 5.13 97	1 0.03 1	0	241 3.95 78	2 0.04 1	38 1.07 21	0.3	--	0.90	--	282 314	8

* TDS by Evap at 105°c

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200 LOWER KINGS RIVER AREA 52220 (CONTINUED)																		
18S/19E-26H 1 M 7-30-63	5126	68	--	470	--	--	106 4.61	--	--	--	--	26 0.73	--	--	0.70	--		10
18S/20E- 6A 1 M 8-19-63	5000	68	9.0	298	1 0.05 2	0	71 3.09 98	0	15 0.50 16	133 2.18 71	6 0.12 4	10 0.28 9	0.0	1.2	0.40	24	194	3
18S/20E- 6E 1 M 6-28-63	5000	67	8.2	380	1 0.05 1	0	90 3.91 99	0	0	179 2.93 77	13 0.27 7	21 0.59 16	0.0	0.8	0.30	19	233 264	3
18S/21E-14F 1 M 7-10-63	5126	63	--	235	--	--	15 0.65	--	--	--	--	10 0.28	--	--	0.00	--		83
19S/19E-25L M 8-30-63	5126	74	8.2	973	6 0.30 3	0	238 10.35 97	2 0.05	0	579 9.49 90	0	38 1.07 10	0.4 0.01	0.4	1.90	27	598 616	15
19S/20E-33A 1 M 7-11-63	5126	75	--	548	--	--	125 5.44	--	--	--	--	30 0.85	--	--	1.00	--		9
19S/21E- 3B 1 M 7-12-63	5126	69	--	286	--	--	61 2.65	--	--	--	--	5 0.14	--	--	0.30	--		18
20S/20E-10L 1 M 7-30-63	5126	71	--	862	--	--	198 8.61	--	--	--	--	32 0.90	--	--	1.30	--		26
20S/21E-12A 1 M 7-11-63	5126	72	--	1400	--	--	142 6.17	--	--	--	--	238 6.71	--	--	0.20	--		371

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million equivalents per million percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
LOWER KINGS RIVER AREA						52220	(CONTINUED)											
20S/21E-16D M 7-19-63	5126	75	--	464	--	--	93 4.04	--	--	--	--	36 1.02	--	--	0.40	--		23
21S/21E- 1A 2 M 7-11-63	5126	68	--	1420	--	--	296 12.87	--	--	--	--	115 3.24	--	--	1.20	--		77
ORANGE COVE IRRIG DIST						52221												
15S/24E-10L 1 M 8-20-63	5000	69	7.6	556	50 2.50 45	20 1.64 29	31 1.35 24	3 0.08 1	0	235 3.85 69	29 0.60 11	23 0.65 12	32.0 0.52 9	0.2	0.00	58	362	207
15S/24E-23K 1 M 8-23-63	5050	72	7.9	313	27 1.35 45	8 0.66 22	21 0.91 31	2 0.05 2	0	128 2.10 71	4 0.08 3	16 0.45 15	20.0 0.32 11	0.2	0.06	59	220 228	101
KAWEAH DELTA WATER						52224												
17S/25E-34P 1 M 6-17-63	5123	79	--	440	--	--	38 1.65	--	--	--	--	35 0.99	--	--	0.00	--		136
18S/24E-19M 1 M 5-28-63	5123	70	--	227	--	--	34 1.48	--	--	--	--	7 0.20	--	--	0.00	--		47
19S/23E- 8H 1 M 7-26-63	5126	70	--	160	--	--	28 1.22	--	--	--	--	6 0.17	--	--	0.00	--		19
20S/22E- 1A 1 M 7-11-63	5126	70	7.7	218	13 0.65 31	0	34 1.48 69	0	0	104 1.70 80	7 0.15 7	8 0.23 11	2.9 0.05 2	--	0.00	--	116 250	33

* TDS by Evap at 105°c

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number Date sampled · Agy. Call	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
				Mineral constituents in parts per million, equivalents per million, percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY KAWEAH DELTA WATER				52200	52224 (CONTINUED)												
20S/26E- 3F 1 M 8-28-63 5050	72	8.0	2040	123 6.14 32	101 8.31 44	101 4.39 23	5 0.13 1	0	170 2.79 15	26 0.54 3	541 15.26 81	22.0 0.35 2	0.2	0.84	38	1042 1120	723
20S/26E- 5R 1 M 6-12-63 5126	73	8.4	640	36 1.80 28	22 1.81 28	65 2.83 43	3 0.08 1	7 0.23 4	142 2.33 36	22 0.46 7	117 3.30 50	14.0 0.23 4	0.1	0.10	19	375 360	181
20S/26E-19F M 6-12-63 5123	75	8.1	405	28 1.40 34	12 0.99 24	39 1.70 41	3 0.08 2	0	140 2.29 56	19 0.40 10	37 1.04 25	22.0 0.35 9	0.1	0.10	32	261 282	120
TULARE IRRIGATION DIST					52225												
19S/23E-24G 1 M 5-28-63 5123	70	--	236	--	--	15 0.65	--	--	--	--	6 0.17	--	--	0.00	--		93
19S/24E-22C 1 M 6-12-63 5123	68	--	186	--	--	23 1.00	--	--	--	--	5 0.14	--	--	0.00	--		47
19S/25E-31J 1 M 5-28-63 5123	69	--	141	--	--	6 0.26	--	--	--	--	1 0.03	--	--	0.00	--		59
LINDMORE IRRIGATION DIST					52228												
20S/26E-13A 1 M 6-12-63 5123	--	8.0	1050	64 3.19 29	47 3.87 35	89 3.87 35	5 0.13 1	0	164 2.69 24	50 1.04 9	236 6.66 60	39.0 0.63 6	0.1	0.20	36	647 690	353
20S/27E-31J 1 M 9- 5-63 5123	74	7.9	591	40 2.00 35	18 1.48 26	49 2.13 37	4 0.10 2	0	204 3.34 60	23 0.48 9	39 1.10 20	42.0 0.68 12	0.2	0.09	29	345 358	174

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
PIXLEY IRRIGATION DIST						52233												
22S/25E-22A M 9-24-63	5123	73	--	270	--	--	33 1.43	--	--	--	--	10 0.28	--	--	0.10	--		71
23S/25E- 9F 1 M 9- 5-63	5123	--	--	273	--	--	35 1.52	--	--	--	--	21 0.59	--	--	0.00	--		63
ALPAUGH-ALLENSWORTH AREA						52234												
23S/24E-32P M 9- 6-63	5123	78	8.0	235	3 0.15 6	1 0.08 3	56 2.43 91	0	0	116 1.90 75	17 0.35 14	10 0.28 11	0.0	1.4	0.10	30	176 182	12
24S/23E- 5R 2 M 9-24-63	5123	--	--	533	--	--	90 3.91	--	--	--	--	67 1.89	--	--	0.20	--		56
DELANO-EARLIMART I.D.						52235												
24S/25E-23H 1 M 9-24-63		77	--	439	--	--	33 1.43	--	--	--	--	19 0.54	--	--	0.00	--		139
25S/26E-16J 1 M 8-15-63	5124	74	--	389	--	--	52 2.26	--	--	--	--	22 0.62	--	--	0.00	--		63
SOUTHERN SAN JOAQUIN MUD						52236												
26S/25E- 3R 1 M 8-15-63	5124	75	8.0	555	50 2.50 44	8 0.66 12	56 2.43 43	2 0.05 1	0	103 1.69 30	85 1.77 32	52 1.47 26	39.0 0.63 11	0.1	0.10	18	361 360	158
26S/26E-16Q 1 M 8-15-63	5124	77	8.1	283	6 0.30 10	1 0.08 3	57 2.48 86	1 0.03 1	0	55 0.90 33	44 0.92 33	27 0.76 28	11.0 0.18 7	0.4	0.00	15	189 190	19

* TDS by Evap at 105°c

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
NORTH KERN WATER STORAGE						52237												
26S/24E-26R 1 M 6-26-63	5124	76	8.0	173	7 0.35 19	1 0.08 4	32 1.39 75	1 0.03 2	0	69 1.13 64	12 0.25 14	10 0.28 16	6.0 0.10 6	0.2	0.10	15	118 118	22
27S/25E- 5R 1 M 6-26-63	5124	78	--	353	--	--	30 1.30	--	--	--	--	9 0.25	--	--	0.00	--		107
27S/25E-34A 2 M 6-20-63	5124	--	7.9	177	8 0.40 22	2 0.16 9	29 1.26 68	1 0.03 2	0	68 1.11 62	5 0.10 6	20 0.56 31	1.4 0.02 1	0.1	0.10	14	114 104	28
SHAFTER-WASCO IRRIG DIST						52238												
27S/24E- 5R 1 M 6-26-63	5124	78	--	146	--	--	27 1.17	--	--	--	--	6 0.17	--	--	0.10	--		10
28S/25E-17L 1 M 7-15-63	5124	--	--	206	--	--	28 1.22	--	--	--	--	10 0.28	--	--	0.10	--		28
28S/26E-30A 1 M 6-20-63	5124	77	--	877	--	--	60 2.61	--	--	--	--	92 2.59	--	--	0.20	--		289
KERN RIVER DELTA AREA						52240												
29S/25E-10N 1 M 6-26-63	5124	75	--	481	--	--	33 1.43	--	--	--	--	69 1.95	--	--	0.10	--		143
29S/25E-32F 1 M 6-13-63	5124	73	8.2	218	12 0.60 26	2 0.16 7	34 1.48 65	1 0.03 1	0	85 1.39 64	17 0.35 16	14 0.39 18	3.1 0.05 2	0.2	0.10	17	142 140	38

* TDS by Evap at 105°c

ANALYSES OF GROUND WATER

1963

State well number / Date sampled	Agy Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200 KERN RIVER DELTA AREA 52240 (CONTINUED)																		
29S/26E- 9R 1 M 6-20-63	5124	76	8.0	660	76 3.79 56	4 0.33 5	59 2.57 38	2 0.05 1	0	107 1.75 26	154 3.21 47	60 1.69 25	9.0 0.15 2	0.1	0.20	14	431 436	206
29S/26E-35K 1 M 9-13-63	5124	66	--	327	--	--	30 1.30	--	--	--	--	26 0.73	--	--	0.40	--		87
30S/24E-14H 1 M 6-13-63	5124	71	--	762	--	--	60 2.61	--	--	--	--	22 0.62	--	--	0.20	--		224
30S/25E-10C 1 M 6-13-63	5124	72	8.1	325	30 1.50 44	2 0.16 5	39 1.70 50	1 0.03 1	0	130 2.13 66	29 0.60 18	14 0.39 12	8.3 0.13 4	0.2	0.20	23	211 212	83
30S/27E-19L 1 M 6- 8-63	5124	71	8.1	332	31 1.55 45	8 0.66 19	28 1.22 35	2 0.05 1	0	135 2.21 66	32 0.67 20	13 0.37 11	4.8 0.08 2	0.1	0.20	20	205 192	111
30S/28E-29B 1 M 6-25-63	5124	71	8.2	320	31 1.55 46	4 0.33 10	33 1.43 43	2 0.05 1	0	135 2.21 66	34 0.71 21	16 0.45 13	0.0	0.2	0.20	19	206 192	94
31S/25E-13B 1 M 7- 2-63	5124	73	8.1	305	2 0.10 3	1 0.08 3	67 2.91 93	1 0.03 1	0	94 1.54 52	20 0.42 14	36 1.02 34	0.0	1.4	0.30	22	197 184	9
31S/26E- 2J 1 M 7- 2-63	5124	73	8.2	220	5 0.25 11	2 0.16 7	45 1.96 83	0	0	114 1.87 77	13 0.27 11	10 0.28 12	0.0	0.2	0.20	13	144 146	21
32S/27E-16R 1 M 3-13-63	5124	--	--	874	--	--	85 3.70	--	--	--	--	23 0.65	--	--	0.50	--		271

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Call	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY EDISON-MARICOPA AREA					52200	52241												
29S/29E-34N 1 M 8- 7-63	5124	81	--	601	--	--	94 4.09	--	--	--	--	47 1.33	--	--	0.20	--		58
30S/28E-11R 1 M 6-11-63	5124	--	--	574	--	--	50 2.17	--	--	--	--	37 1.04	--	--	0.20	--		173
30S/28E-25A 1 M 6-11-63	5124	75	--	469	--	--	47 2.04	--	--	--	--	27 0.76	--	--	0.30	--		125
30S/29E-15H 2 M 6- 8-63	5124	74	8.1	570	56 2.79 44	17 1.40 22	47 2.04 32	4 0.10 2	0	234 3.84 61	58 1.21 19	43 1.21 19	0.0	0.2	0.20	15	355 348	210
30S/29E-20A 1 M 6-11-63	5124	72	--	862	--	--	52 2.26	--	--	--	--	73 2.06	--	--	0.20	--		315
30S/29E-27J 1 M 8- 7-63	5124	69	--	970	--	--	59 2.57	--	--	--	--	57 1.61	--	--	0.30	--		348
31S/24E-28B 1 M 7- 2-63	5124	73	--	6080	--	--	779 33.87	--	--	--	--	850 23.97	--	--	4.10	--		1840
31S/30E-30C 1 M 6-25-63	5124	71	8.0	495	50 2.50 51	9 0.74 15	35 1.52 31	4 0.10 2	0	150 2.46 49	26 0.54 11	35 0.99 20	61.0 0.98 20	0.2	0.10	19	313 294	162
32S/25E-34G 1 M 7- 2-63	5124	79	7.8	3600	557 27.79 55	75 6.17 12	382 16.61 33	11 0.28 1	0	146 2.39 5	2272 47.30 92	52 1.47 3	0.0	0.2	3.00	38	3462 3810	1699

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
EDISON-MARICOPA AREA						52241	(CONTINUED)											
32S/28E-12F 1 M 7- 2-63	5124	72	--	368	--	--	46 2.00	--	--	--	--	14 0.39	--	--	0.30	--		76
32S/29E-35M 2 M 7- 2-63	5124	73	7.9	990	77 3.84 35	32 2.63 24	99 4.30 39	6 0.15 1	0	184 3.02 29	120 2.50 24	92 2.59 25	149.0 2.40 23	0.2	0.20	17	683 686	324
11N/18W-14M 1 S 8-22-63	5124	77	--	564	--	--	24 1.04	--	--	--	--	14 0.39	--	--	0.30	--		247
11N/20W- 8R 1 S 7- 2-63	5124	78	--	1580	--	--	131 5.70	--	--	--	--	54 1.52	--	--	0.60	--		567
11N/20W-25K 1 S 7- 2-63	5124	78	--	2530	--	--	235 10.22	--	--	--	--	58 1.64	--	--	0.30	--		946
11N/22W- 8G 1 S 7- 2-63	5124	77	8.0	2900	341 17.02 42	131 10.77 27	277 12.04 30	11 0.28 1	0	135 2.21 6	1542 32.10 81	179 5.05 13	25.0 0.40 1	1.0	1.40	17	2592 2740	1391
12N/19W-33R 1 S 7- 2-63	5124	74	--	352	--	--	34 1.48	--	--	--	--	7 0.20	--	--	0.20	--		98
BUENA VISTA WATER STORAGE						52242												
27S/22E-21P 1 M 2- 7-63	5640	67	7.8	2990	224 11.18 36	24 1.97 6	412 17.91 58	3 0.08	0	136 2.23 7	592 12.33 41	553 15.59 52	1.3 0.02	0.4	1.50	34	1912 1960	658
27S/22E-28G 2 M 2- 8-63	5640	68	8.1	1660	100 4.99 30	8 0.66 4	250 10.87 66	1 0.03	0	157 2.57 16	420 8.74 54	173 4.88 30	1.2 0.02	0.4	0.64	24	1055 1070	283

* TDS by Evap at 105°c

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Call.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY 52200																		
BUENA VISTA WATER STORAGE 52242 (CONTINUED)																		
28S/22E- 4A 1 M 2-18-63	5640	67	--	2400	--	--	397 17.26	1 0.03	--	--	--	443 12.49	--	--	0.74	--		309
28S/22E-10R 1 M 2- 7-63	5640	67	--	1270	--	--	188 8.17	1 0.03	--	--	--	101 2.85	--	--	0.56	--		244
28S/22E-26J 1 M 2- 7-63	5640	--	8.0	1170	100 4.99 40	16 1.32 11	141 6.13 49	2 0.05	0	215 3.52 29	334 6.95 57	58 1.64 14	1.1 0.02	0.4	0.49	29	788 788	316
28S/22E-36N 1 M 2- 7-63	5640	67	--	1520	--	--	198 8.61	2 0.05	--	--	--	105 2.96	--	--	0.71	--		357
30S/23E- 1C 3 M 2- 7-63	5640	69	--	602	--	--	114 4.96	1 0.03	--	--	--	150 4.23	--	--	0.41	--		28
31S/25E-25H 1 M 3- 4-63	5640	73	--	434	--	--	75 3.26	1 0.03	--	--	--	7 0.20	--	--	0.47	--		44
32S/27E- 6D 1 M 3-13-63	5640	74	--	393	--	--	70 3.04	1 0.03	--	--	--	10 0.28	--	--	0.32	--		31
SEMITROPIC WATER STORAGE 52243																		
25S/22E- 2P 2 M 5-15-63	5124	74	8.2	270	3 0.15 5	1 0.08 3	58 2.52 92	0	0	96 1.57 59	33 0.69 26	15 0.42 16	0.0	0.4	0.20	18	176 182	12
25S/25E- 4Q 1 M 8-15-63	5124	73	--	442	--	--	36 1.57	--	--	--	--	31 0.87	--	--	0.00	--		127

a TDS by Evap at 105°c

TABLE E-1

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY SEMITROPIC WATER STORAGE					52200	52243 (CONTINUED)												
26S/22E-10G 1 M 8-15-63	5124	73	8.5	217	2 0.10 5	1 0.08 4	47 2.04 92	0	2 0.07 3	77 1.26 59	17 0.35 16	16 0.45 21	0.0	0.6	0.10	24	148 148	9
26S/22E-27Q 1 M 8-15-63	5124	75	7.6	2700	132 6.59 22	17 1.40 5	490 21.31 73	2 0.05	0	90 1.48 5	403 8.39 29	677 19.09 66	0.0	1.0	1.20	19	1786 1750	400
26S/24E- 3R 1 M 8-15-63	5124	77	--	170	--	--	32 1.39	--	--	--	--	7 0.20	--	--	0.10	--		9
27S/22E- 2Q 2 M 2- 8-63	5640	74	--	4080	--	--	722 31.39	2 0.05	--	--	--	1140 32.15	--	--	1.40	--		383
27S/23E-27J 1 M 6-26-63	5124	80	--	281	--	--	55 2.39	--	--	--	--	47 1.33	--	--	0.10	--		8
28S/23E-25P 1 M 6-26-63	5124	72	--	537	--	--	81 3.52	--	--	--	--	71 2.00	--	--	0.10	--		58
AVENAL-MCKITTRICK AREA						52244												
22S/17E-15M 2 M 7-11-63	5126	80	7.8	1340	41 2.05 15	6 0.49 3	265 11.52 82	2 0.05	0	73 1.20 9	45 0.94 7	411 11.59 84	1.3 0.02	0.2	0.70	28	836 906	127
22S/19E-20N 3 M 7-11-63	5126	78	8.2	1180	12 0.60 5	6 0.49 4	238 10.35 90	2 0.05	0	361 5.92 51	43 0.90 8	169 4.77 41	0.0	--	1.10	--	649	55
23S/18E-29E 1 M 7-11-63	5126	92	8.2	2875	114 5.69 15	89 7.32 19	560 24.35 65	9 0.23 1	0	182 2.98 8	1458 30.36 82	124 3.50 9	4.5 0.07	0.4	2.80	42	2493 2480	651

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY AVENAL-MCKITTRICK AREA					52200	52244	(CONTINUED)											
24S/18E-19Q 1 M 7-25-63	5126	71	8.4	1470	80 3.99 23	72 5.92 34	175 7.61 43	4 0.10 1	4 0.13 1	252 4.13 23	513 10.68 60	90 2.54 14	17.0 0.27 2	0.2	1.60	26	1107 1084	496
24S/19E-30N 1 M 7-11-63	5126	76	8.1	2560	128 6.39 22	147 12.09 42	231 10.04 35	7 0.18 1	0	262 4.29 15	810 16.86 58	262 7.39 25	29.0 0.47 2	--	1.80	--	1745 1950	925
25S/18E- 3N 2 M 8- 8-63	5124	73	--	4220	--	--	295 12.83	--	--	--	--	719 20.28	--	--	2.20	--		1710
25S/19E- 7P 1 M 8- 8-63	5124	78	--	5310	--	--	674 29.31	--	--	--	--	404 11.39	--	--	7.70	--		1470
25S/19E-23B 1 M 8- 8-63	5124	80	7.6	3425	160 7.98 18	141 11.60 27	550 23.91 55	1 0.03	0	259 4.25 10	1389 28.92 67	355 10.01 23	4.5 0.07	0.4	2.80	33	2764 2930	980
26S/18E- 1A 1 M 8- 8-63	5124	66	7.9	5120	107 5.34 10	120 9.87 19	862 37.48 71	4 0.10	0	379 6.21 12	612 12.74 24	1180 33.28 64	1.0 0.02	--	2.60	--	3075 3190	761
26S/18E-23M 2 M 8- 8-63	5124	76	8.2	2475	120 5.99 20	106 8.72 30	335 14.57 50	3 0.08	0	229 3.75 13	894 18.61 64	223 6.29 22	20.0 0.32 1	0.4	1.80	35	1851 1970	736
27S/19E-28H 1 M 8-15-63	5124	--	7.2	6700	417 20.81 22	180 14.80 16	1325 57.61 62	10 0.26	0	501 8.21 9	2620 54.55 59	1035 29.19 32	0.0	0.8	7.20	17	5858 5830	1782
27S/20E-34G 1 M 6- 8-63	5124	83	--	4040	--	--	815 35.44	--	--	--	. --	689 19.43	--	--	13.00	--		161

TABLE E-1

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Call.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
SAN JOAQUIN VALLEY					52200													
TULARE LAKE-LOST HILLS						52245												
23S/21E-18D 1 M 7-11-63	5126	71	--	11700	--	--	2340 101.74	--	--	--	--	3450 97.29	--	--	7.60	--		1010
24S/22E-35N 1 M 7-11-63	5126	68	7.7	483	18 0.90 19	3 0.25 5	84 3.65 76	1 0.03 1	0	188 3.08 65	59 1.23 26	15 0.42 9	0.0	--	0.20	--	273 306	58
CORCORAN IRRIGATION DIST						52246												
21S/22E-13G 1 M 7-11-63	5126	67	--	292	--	--	46 2.00	--	--	--	--	15 0.42	--	--	0.10	--		51
21S/22E-22M 2 M 7-11-63	5126	71	--	1120	--	--	212 9.22	--	--	--	--	152 4.29	--	--	0.40	--		108
22S/22E-10A 1 M 7-11-63	5126	77	--	294	--	--	54 2.35	--	--	--	--	14 0.39	--	--	0.20	--		31
MENDOTA-HURON AREA						52247												
13S/14E-15B 1 M 8-26-63	5050	76	--	2450	--	--	488 21.22	--	--	--	--	300 8.46	--	--	1.10	--		108
13S/14E-34M 1 M 8-26-63	5050	73	--	4670	--	--	578 25.13	--	--	--	--	699 19.71	--	--	2.20	--		1320
14S/13E-12N 1 M 8-13-63	5050	87	--	2930	--	--	556 24.17	--	--	--	--	586 16.53	--	--	1.30	--		165

* TDS by Evap at 105°c

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY MENDOTA-HURON AREA					52200	52247 (CONTINUED)												
14S/13E-25N 1 M 8-13-63	5050	86	--	2600	--	--	390 16.96	--	--	--	--	218 6.15	--	--	2.20	--		533
14S/14E- 9E 1 M 8-13-63	5050	80	--	4190	--	--	439 19.09	--	--	--	--	631 17.79	--	--	1.80	--		1390
14S/14E-33N 1 M 8-26-63	5050	78	8.2	1675	108 5.39 25	94 7.73 36	193 8.39 39	6 0.15 1	0	207 3.39 16	770 16.03 73	85 2.40 11	0.9 0.01	0.2	1.90	37	1398 1440	657
14S/15E-28L 1 M 8- 1-63	5050	80	--	1500	--	--	273 11.87	--	--	--	--	77 2.17	--	--	1.40	--		103
15S/14E-36Q 2 M 8-13-63	5050	87	--	1650	--	--	301 13.09	--	--	--	--	84 2.37	--	--	2.00	--		133
15S/15E-20N 2 M 8-13-63	5050	73	--	1820	--	--	143 6.22	--	--	--	--	79 2.23	--	--	0.70	--		711
15S/15E-25N 1 M 8-13-63	5050	72	8.2	3100	267 13.32 30	161 13.24 30	395 17.17 39	7 0.18	0	176 2.88 7	1664 34.64 80	209 5.89 14	0.0	0.2	1.30	30	2821 3050	1329
16S/14E-10Q 1 M 8-13-63	5050	87	--	1510	--	--	195 8.48	--	--	--	--	36 1.02	--	--	1.80	--		328
16S/15E- 8N 1 M 8-13-63	5050	--	--	1490	--	--	148 6.44	--	--	--	--	55 1.55	--	--	1.00	--		466

* TDS by Evap at 105°c

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million, equivalents per million, percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY MENDOTA-HURON AREA					52200	52247	(CONTINUED)											
16S/15E-25Q 1 M 8-26-63	5050	78	8.2	1570	96 4.79 24	91 7.48 37	175 7.61 38	4 0.10 1	0	168 2.75 14	738 15.37 76	77 2.17 11	0.0	0.2	1.20	32	1297 1450	614
16S/16E- 9N 2 M 8-13-63	5050	76	8.1	1375	86 4.29 26	33 2.71 17	210 9.13 56	5 0.13 1	0	150 2.46 15	584 12.16 74	64 1.80 11	0.9 0.01	0.2	1.10	36	1094 1050	350
17S/16E-18E 1 M 8-22-63	5050	88	--	1530	--	--	267 11.61	--	--	--	--	112 3.16	--	--	1.70	--		127
17S/17E-23Q 1 M 8-22-63	5050	76	--	1340	--	--	176 7.65	--	--	--	--	50 1.41	--	--	0.80	--		265
17S/17E-27R 1 M 8-22-63	5050	75	--	1370	--	--	172 7.48	--	--	--	--	51 1.44	--	--	0.70	--		301
17S/17E-28R 1 M 8-22-63	5050	72	--	3670	--	--	393 17.09	--	--	--	--	166 4.68	--	--	2.20	--		1280
18S/15E-24N 1 M 8-22-63	5050	92	--	2470	--	--	384 16.70	--	--	--	--	202 5.70	--	--	2.70	--		403
18S/17E-13N 1 M 8-22-63	5050	88	--	1180	--	--	216 9.39	--	--	--	--	143 4.03	--	--	1.40	--		61
18S/17E-30P 1 M 8-22-63	5050	--	--	3020	--	--	568 24.70	--	--	--	--	768 21.66	--	--	1.60	--		168

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million, equivalents per million, percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY MENDOTA-HURON AREA					52200	52247 (CONTINUED)												
18S/19E- 6A 1 M 8-19-63	5000	68	9.0	298	1 0.05 2	0	71 3.09 98	0	15 0.50 16	133 2.18 71	6 0.12 4	10 0.28 9	0.0	1.2	0.40	24	194	3
19S/17E-13N 1 M 8-22-63	5050	--	--	1400	--	--	144 6.26	--	--	--	--	56 1.58	--	--	0.70	--		406
19S/18E-23D 2 M 8-22-63	5050	79	--	1680	--	--	220 9.57	--	--	--	--	100 2.82	--	--	1.00	--		365
19S/18E-28E 1 M 8-22-63	5050	91	--	1870	--	--	351 15.26	--	--	--	--	328 9.25	--	--	1.30	--		129
19S/19E-15N 1 M 7-11-63	5050	77	8.1	1750	78 3.89 23	5 0.41 2	289 12.57 74	2 0.05	0	200 3.28 19	437 9.10 52	178 5.02 29	2.0 0.03	--	1.50	--	1091 1180	215
20S/15E-25D 2 M 8-23-63	5050	72	--	2170	--	--	224 9.74	--	--	--	--	133 3.75	--	--	1.50	--		677
20S/17E-11N 1 M 8-23-63	5050	78	--	1570	--	--	154 6.70	--	--	--	--	56 1.58	--	--	1.00	--		500
20S/17E-36D 1 M 8-23-63	5050	78	--	1330	--	--	134 5.83	--	--	--	--	35 0.99	--	--	0.60	--		391
21S/18E- 1D 1 M 7-11-63	5126	75	--	1540	--	--	186 8.09	--	--	--	--	66 1.86	--	--	0.70	--		391

TABLE E-1

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
MENDOTA-HURON AREA						52247 (CONTINUED)												
21S/18E-17M 1 M 7-11-63	5126	76	7.8	1200	84 4.19 34	37 3.04 25	116 5.04 41	3 0.08 1	0	106 1.74 14	487 10.14 79	28 0.79 6	6.6 0.11 1	--	0.40	--	814 905	362
SAN LUIS CANAL COMPANY						52249												
9S/11E-26N 1 M 6-27-63	5050	65	8.2	880	29 1.45 16	11 0.90 10	157 6.83 74	2 0.05 1	0	188 3.08 33	83 1.73 19	156 4.40 48	0.0	0.1	0.40	18	549 564	118
10S/12E- 6K 1 M 7-18-63	5641	--	--	859	--	--	118 5.13	--	--	--	--	134 3.78	--	--	0.30	--		149
STANISLAUS PLAINS						52253												
1N/10E-17G 1 M 8-14-63	5122	69	--	268	--	--	17 0.74	--	--	--	--	15 0.42	--	--	0.20	--		97
1S/11E-25N 1 M 6-28-63	5122	70	--	336	--	--	18 0.78	--	--	--	--	10 0.28	--	--	0.20	--		121
3S/11E- 4N 1 M 8-14-63	5122	71	--	307	--	--	21 0.91	--	--	--	--	23 0.65	--	--	0.00	--		97
3S/12E-35C 1 M 6-28-63	5122	68	--	4300	--	--	418 18.17	--	--	--	--	1320 37.22	--	--	0.40	--		1010
5S/12E- 6D 1 M 6-28-63	5122	71	--	216	--	--	20 0.87	--	--	--	--	10 0.28	--	--	0.10	--		59

* TDS by Evap at 105°c

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY MERCED BOTTOMS					52200	52254												
7S/10E- 7M 1 M 8-26-63	5641	--	8.4	940	36 1.80 17	6 0.49 5	185 8.04 77	3 0.08 1	10 0.33 3	374 6.13 60	65 1.35 13	86 2.43 24	0.0	0.2	0.20	29	604 616	115
8S/13E-16H 1 M 7-18-63	5050	69	8.4	612	50 2.50 38	25 2.06 31	47 2.04 31	1 0.03	5 0.17 3	327 5.36 82	15 0.31 5	24 0.68 10	2.6 0.04 1	0.2	0.06	57	388 394	228
8S/14E-24A 1 M 8-19-63	5525	67	--	437	--	--	24 1.04	--	--	--	--	3 0.08	--	--	0.0.0	--		170
9S/12E-17B 1 M 8-28-63	5050	69	8.2	810	24 1.20 14	3 0.25 3	160 6.96 82	1 0.03	0	160 2.62 32	69 1.44 17	148 4.17 51	0.0	0.2	0.10	26	510 488	73
9S/13E-29L 1 M 7-17-63	5050	74	8.0	785	54 2.69 33	17 1.40 17	90 3.91 49	1 0.03	0	132 2.16 27	10 0.21 3	197 5.56 70	0.0	0.2	0.10	37	471 494	205
NORTH MERCED PLAINS						52255												
4S/14E- 8J 1 M 8-28-63	5050	73	7.9	239	20 1.00 38	7 0.58 22	23 1.00 38	1 0.03 1	0	90 1.48 59	3 0.06 2	23 0.65 26	20.0 0.32 13	0.2	0.10	57	199 202	79
5S/12E-32P 1 M 7-18-63	5050	74	--	156	--	--	15 0.65	--	--	--	--	9 0.25	--	--	0.10	--		38
5S/14E- 3P 1 M 7-18-63	5050	78	7.1	143	13 0.65 43	8 0.66 44	4 0.17 11	1 0.03 2	0	69 1.13 78	8 0.17 12	5 0.14 10	0.0	0.2	0.10	13	86 78	66

* TDS by Evap at 105°C

TABLE E-I
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY					52200													
NORTH MADERA PLAINS						52257												
9S/15E-24F 1 M 8- 7-63	5050	73	--	240	--	--	18 0.78	--	--	--	--	19 0.54	--	--	0.00	--		75
10S/17E-25N 1 M 8- 7-63	5050	75	--	238	--	--	19 0.83	--	--	--	--	16 0.45	--	--	0.00	--		71
NORTH FRESNO PLAINS						52259												
12S/21E- 6K 1 M 8-20-63	5000	--	7.2	262	20 1.00 41	7 0.58 24	18 0.78 32	3 0.08 3	0	91 1.49 77	5 0.10 5	11 0.31 16	2.7 0.04 2	0.0	0.10	71	183	79
12S/22E-20R 1 M 8- 8-63	5000	70	7.7	602	52 2.59 39	32 2.63 40	30 1.30 20	3 0.08 1	0	334 5.47 83	17 0.35 5	23 0.65 10	6.0 0.10 2	0.1	0.00	49	376	261
13S/22E-14D 1 M 8- 8-63	5000	71	7.6	553	30 1.50 27	35 2.88 52	25 1.09 20	2 0.05 1	0	270 4.43 82	10 0.21 4	18 0.51 9	14.0 0.23 4	0.2	0.00	45	312	219
13S/23E- 7N 2 M 8-13-63	5000	66	8.0	382	42 2.10 54	7 0.58 15	27 1.17 30	2 0.05 1	0	180 2.95 78	17 0.35 9	11 0.31 8	10.0 0.16 4	0.4	0.11	32	237 234	134
NORTH TULARE PLAINS						52261												
14S/24E-36L 1 M 8- 8-63	5000	70	7.5	447	38 1.90 40	17 1.40 30	31 1.35 29	3 0.08 2	0	218 3.57 76	11 0.23 5	14 0.39 8	30.0 0.48 10	0.2	0.60	50	302	165
15S/25E- 8C 1 M 8-13-63	5000	67	7.2	544	50 2.50 46	14 1.15 21	41 1.78 32	2 0.05 1	0	188 3.08 58	39 0.81 15	20 0.56 11	52.0 0.84 16	0.4	0.00	54	365	183

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number / Date sampled	Agy. Coll	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY NORTH TULARE PLAINS					52200	52261 (CONTINUED)												
15S/25E-16R 1 M 8- 9-63	5000	71	8.4	606	61 3.04 47	18 1.48 23	43 1.87 29	2 0.05 1	4 0.13 2	256 4.20 66	15 0.31 5	58 1.64 26	4.7 0.08 1	0.2	0.00	48	380	226
15S/25E-19H 1 M 8- 9-63	5000	68	8.4	625	59 2.94 44	23 1.89 28	42 1.83 27	2 0.05 1	16 0.53 8	204 3.34 51	26 0.54 8	59 1.66 25	29.0 0.47 7	0.3	0.10	44	401	242
18S/26E-10M 1 M 7-29-63	5123	67	8.1	680	65 3.24 44	22 1.81 25	52 2.26 31	2 0.05 1	0	268 4.39 60	48 1.00 14	22 0.62 9	78.0 1.26 17	0.1	0.10	31	452 454	253
SOUTH TULARE PLAINS						52262												
21S/27E-15P 2 M 8-28-63	5123	74	--	572	--	--	28 1.22	--	--	--	--	25 0.71	--	--	0.10	--		242
21S/27E-27F 1 M 9- 5-63	5123	80	--	492	--	--	57 2.48	--	--	--	--	34 0.96	--	--	1.00	--		101
22S/27E-11C 1 M 9- 5-63	5123	80	--	540	--	--	28 1.22	--	--	--	--	12 0.34	--	--	0.10	--		230
KERN PLAINS						52263												
25S/26E- 1R 1 M 6-11-63	5124	76	--	360	--	--	50 2.17	--	--	--	--	25 0.71	--	--	0.20	--		54
25S/27E- 4C 1 M 6-20-63	5124	86	8.1	455	15 0.75 16	1 0.08 2	90 3.91 81	3 0.08 2	0	120 1.97 42	62 1.29 27	50 1.41 30	1.8 0.03 1	0.4	0.20	33	315 308	42

TABLE E-I

ANALYSES OF GROUND WATER

1963

State well number: Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY KERN PLAINS					52200	52263	(CONTINUED)											
26S/27E- 9G 1 M 6-11-63	5124	74	--	1790	--	--	110 4.78	--	--	--	--	222 6.26	--	--	0.10	--		697
27S/26E-27R 1 M 6-20-63	5124	76	--	545	--	--	50 2.17	--	--	--	--	78 2.20	--	--	0.20	--		131
27S/27E-29J 1 M 8-14-63	5124	73	--	1050	--	--	96 4.17	--	--	--	--	199 5.61	--	--	0.40	--		283
28S/26E-11A 1 M 7-15-63	5124	78	--	610	--	--	74 3.22	--	--	--	--	103 2.90	--	--	0.10	--		81
28S/27E- 7C 1 M 6-11-63	5124	78	--	276	--	--	59 2.57	--	--	--	--	39 1.10	--	--	0.00	--		5
28S/27E-28L 1 M 7-15-63	5124	80	7.8	238	2 0.10 4	1 0.08 3	55 2.39 93	0	0	75 1.23 49	35 0.73 29	19 0.54 22	0.0	0.2	0.00	15	164 172	9
CENTERVILLE BOTTOMS						52264												
14S/22E-25P 1 M 8-12-63	5050	77	8.0	360	30 1.50 42	9 0.74 21	29 1.26 35	2 0.05 1	0	172 2.82 79	14 0.29 8	17 0.48 13	0.1	0.1	0.18	20	206 209	112
14S/23E- 8D 1 M 8-13-63	5000	68	7.3	215	16 0.80 41	10 0.82 42	7 0.30 15	2 0.05 3	0	95 1.56 78	7 0.15 8	5 0.14 7	9.6 0.15 8	0.0	0.00	26	129	81

* TDS by Evap at 105°C

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Call.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million, equivalents per million, percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY KINGS COUNTY WATER DIST					52200	52266												
19S/26E- 3K 1 M 6-12-63	5123	73	--	552	--	--	44 1.91	--	--	--	--	41 1.16	--	--	0.00	--		182
CENTRAL CALIF. I.D.						52267												
6S/ 9E-18F 1 M 8-17-63	5641	--	--	637	--	--	42 1.83	--	--	--	--	18 0.51	--	--	0.30	--		250
7S/ 8E-12P 1 M 8- 6-63	5641	--	--	970	--	--	73 3.17	--	--	--	--	84 2.37	--	--	0.40	--		348
7S/ 8E-13F M 8- 6-63	5641	--	8.1	1000	68 3.39 30	39 3.21 28	110 4.78 42	3 0.08 1	0	349 5.72 50	115 2.39 21	106 2.99 26	14.0 0.23 2	0.1	0.50	21	648 663	330
7S/ 8E-23R 1 M 8- 6-63	5641	--	--	1480	--	--	147 6.39	--	--	--	--	277 7.81	--	--	0.50	--		402
7S/ 9E-32H 1 M 8- 6-63	5641	--	--	1030	--	--	92 4.00	--	--	--	--	68 1.92	--	--	0.50	--		336
8S/ 9E-16E 1 M 7-23-63	5641	--	--	986	--	--	88 3.83	--	--	--	--	74 2.09	--	--	0.60	--		333
9S/ 9E- 5B 1 M 7-23-63	5641	--	--	986	--	--	100 4.35	--	--	--	--	89 2.51	--	--	0.80	--		292
9S/13E-31D 1 M 7-18-63	5641	--	--	802	--	--	98 4.26	--	--	--	--	142 4.00	--	--	0.00	--		161

ANALYSES OF GROUND WATER

1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Mineral constituents in parts per million, equivalents per million, percent reactance value Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Mineral constituents in parts per million Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
SAN JOAQUIN VALLEY CENTRAL CALIF. I.D. 52200 52267 (CONTINUED)																		
10S/10E-28D 1 M 7-23-63	5641	--	--	705	--	--	38 1.65	--	--	--	--	63 1.78	--	--	0.40	--		285
10S/12E-25L 1 M 7-18-63	5641	--	8.2	810	43 2.15 26	12 0.99 12	119 5.17 62	2 0.05 1	0	143 2.34 29	58 1.21 15	165 4.65 57	0.0	0.2	0.20	15	485 496	157
10S/12E-27K 1 M 7-23-63	5641	--	--	1640	--	--	195 8.48	--	--	--	--	374 10.55	--	--	0.40	--		328
10S/12E-35K 1 M 7-23-63	5641	--	--	2070	--	--	284 12.35	--	--	--	--	514 14.49	--	--	0.70	--		345
11S/10E-23K 1 M 8-16-63	5641	--	--	4600	--	--	500 21.74	--	--	--	--	840 23.69	--	--	1.80	--		1460
11S/12E-13J 1 M 7-23-63	5641	--	--	1770	--	--	192 8.35	--	--	--	--	407 11.48	--	--	0.30	--		417
11S/13E-17F 1 M 7-23-63	5641	--	--	1360	--	--	195 8.48	--	--	--	--	275 7.76	--	--	0.60	--		205
11S/13E-36B 1 M 7-23-63	5641	--	--	1240	--	--	195 8.48	--	--	--	--	241 6.80	--	--	0.40	--		134
12S/14E-29B 1 M 7-23-63	5641	--	--	1190	--	--	160 6.96	--	--	--	--	208 5.87	--	--	0.40	--		200

* TDS by Evap at 105°c

TABLE E-1
ANALYSES OF GROUND WATER
1963

State well number Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed Evap 180°C	Total hardness as $CaCO_3$
					Mineral constituents in parts per million equivalents per million percent reactance value									Mineral constituents in parts per million				
SAN JOAQUIN VALLEY CENTRAL CALIF.			I.D.		52200	52267 (CONTINUED)												
13S/15E-18L 1 M 7-23-63	5641	--	--	480	--	--	98 4.26	--	--	--	--	51 1.44	--	--	0.40	--		7
PANOCHE VALLEY					52300													
15S/10E-20D 1 M 4- 3-63	5050	78	7.8	1350	107 5.34 37	48 3.95 27	120 5.22 36	4 0.10 1	0	342 5.61 37	380 7.91 53	50 1.41 9	6.1 0.10 1	0.3	1.70	52	937 960	465
15S/10E-21C 1 M 4- 3-63	5050	86	8.0	1710	107 5.34 28	66 5.43 29	186 8.09 43	5 0.13 1	0	280 4.59 24	606 12.62 66	63 1.78 9	1.6 0.03	0.3	3.00	52	1228 1280	539
15S/10E-21L 1 M 4- 3-63	5050	--	--	1780	--	--	154 6.70	6 0.15	--	--	--	53 1.49	--	--	2.00	--		651
15S/10E-22D 1 M 4- 3-63	5050	74	7.9	1280	87 4.34 33	48 3.95 30	109 4.74 36	3 0.08 1	0	150 2.46 18	457 9.51 71	44 1.24 9	9.1 0.15 1	0.5	1.20	49	882 914	415
15S/11E-30C 1 M 4- 3-63	5050	74	8.0	3310	172 8.58 23	143 11.76 31	403 17.52 46	6 0.15	0	188 3.08 8	1430 29.77 76	231 6.51 17	3.9 0.06	0.3	8.60	50	2540 2750	1018
CUMMINGS VALLEY					52700													
32S/31E-35N 1 M 6-10-63	5050	--	8.0	441	43 2.15 49	11 0.90 21	28 1.22 28	4 0.10 2	0	158 2.59 60	55 1.15 26	18 0.51 12	6.5 0.10 2	0.4	0.07	49	293 266	153
32S/32E-19Q 1 M 6-10-63	5124	--	8.0	557	64 3.19 57	11 0.90 16	32 1.39 25	4 0.10 2	0	145 2.38 44	115 2.39 44	19 0.54 10	10.0 0.16 3	0.4	0.10	45	372 386	205

ANALYSES OF GROUND WATER

1963

State well number / Date sampled	Agy. Coll.	Temp. when sampled °F	pH	Specific conductance (micromhos at 25°C)	Calcium Ca	Magnesium Mg	Sodium Na	Potassium K	Carbonate CO_3	Bicarbonate HCO_3	Sulfate SO_4	Chloride Cl	Nitrate NO_3	Fluoride F	Boron B	Silica SiO_2	TDS Computed / Evap 180°c	Total hardness as $CaCO_3$
					Mineral constituents in parts per million / equivalents per million / percent reactance value									Mineral constituents in parts per million				
CUMMINGS VALLEY					52700 (CONTINUED)													
32S/32E-27P 6-14-63	M 5050	62	7.7	477	57 2.84 59	14 1.15 24	18 0.78 16	1 0.03 1	0	215 3.52 72	43 0.90 18	8 0.23 5	14.0 0.23 5	0.1	0.03	32	293 301	200
32S/32E-28H 6-11-63	M 5050	--	7.7	545	70 3.49 59	20 1.64 28	18 0.78 13	1 0.03 1	0	263 4.31 75	43 0.90 16	9 0.25 4	16.0 0.26 5	0.2	0.05	53	360 370	257
TEHACHAPI VALLEY					52800													
32S/32E-13P 6-11-63	M 5050	--	8.4	429	48 2.40 54	8 0.66 15	30 1.30 29	2 0.05 1	3 0.10 2	187 3.06 70	36 0.75 17	13 0.37 8	5.9 0.10 2	0.4	0.14	28	266 265	153
32S/32E-26Q 6-12-63	M 5050	--	8.4	1060	167 8.33 69	24 1.97 16	38 1.65 14	2 0.05	12 0.40 3	299 4.90 41	258 5.37 45	35 0.99 8	16.0 0.26 2	0.2	0.09	36	735 798	515
32S/33E-27D 6-13-63	M 5050	--	8.3	672	97 4.84 71	11 0.90 13	25 1.09 16	1 0.03	0	182 2.98 49	56 1.17 19	35 0.99 16	56.0 0.90 15	0.1	0.00	22	393 427	287
32S/33E-29P 1 6-12-63	M 5050	--	7.9	243	27 1.35 58	5 0.41 18	12 0.52 23	1 0.03 1	0	86 1.41 61	7 0.15 6	8 0.23 10	32.0 0.52 23	0.4	0.05	36	171 169	88
32S/33E-30C 6-12-63	M 5050	--	8.5	498	67 3.34 62	11 0.90 17	26 1.13 21	2 0.05 1	5 0.17 3	241 3.95 74	42 0.87 16	11 0.31 6	4.3 0.07 1	0.2	0.07	25	312 306	212
32S/34E-34B 6-13-63	M 5050	--	8.5	645	46 2.30 34	13 1.07 16	75 3.26 49	2 0.05 1	9 0.30 5	237 3.88 60	61 1.27 20	14 0.39 6	40.0 0.65 10	0.6	0.53	32	410 410	169

* TDS by Evap at 105°c

TABLE E-2

HEAVY METAL ANALYSES OF GROUND WATER

Well Location Number	Use	Date	Constituents In Parts Per Billion																	
			Aluminum (Al)	Arsenic (As)	Beryllium (Be)	Bismuth (Bi)	Cadmium (Cd)	Cobalt (Co)	Chromium (Cr)	Copper (Cu)	Iron (Fe)	Gallium (Ga)	Germanium (Ge)	Manganese (Mn)	Molybdenum (Mo)	Nickel (Ni)	Lead (Pb)	Titanium (Ti)	Vanadium (V)	Zinc (Zn)
Modesto Irrigation District																				
3S/ 7E - 13A2 - M	Irrigation	6-26-63	10	10						0	0			0			0			0
Turlock Irrigation District																				
4S/ 9E - 30R1 - M	Drainage	9-19-63	50	0						0	0			0			0			0
4S/11E - 21D1 - M	Drainage	9-19-63	20	0						0	10			0			0			0
5S/10E - 28H1 - M	Drainage	9-26-63	110	0						0	0			0			0			0
6S/11E - 9C1 - M	Drainage	9-13-63	0	0						0	0			0			0			0
El Nido Irrigation District																				
9S/14E - 20B - M	Irrigation	6-27-63	100	0						0	10			0			0			40
Delta Mendota Area																				
4S/ 7E - 34J1 - M	Irrigation	7-17-63	20	0						0	10			0			0			0
9S/ 9E - 21F1 - M	Irrigation	7-23-63	20	0						20	0			0			0			0
9S/10E - 36R1 - M	Irrigation	7-22-63	30	10						0	450			0			0			50
Lower Kings River Area																				
18S/19E - 6G1 - M	Irrigation	7-30-63	90	0						10	30			0			10			0
Kaweah Delta Water Conservation District																				
20S/22E - 1A1 - M	Dom. & Irr.	7-11-63	120	20						0	10			0			0			0
Avenal-McKittrick Area																				
22S/19E - 20N - M	Irrigation	7-11-63	20	0						10	0			0			0			0
24S/19E - 30N1 - M	Irrigation	7-11-63	110	0						0	20			0			0			0

> More than the amount indicated.

< Less than the amount indicated.

Blank space indicates constituent not analyzed.

TABLE B-4

HEAVY METAL ANALYSES OF GROUND WATER

Table E-3

QUALITY OF GROUND WATERS IN CALIFORNIA

RADIOASSAY OF GROUND WATER

1963

WELL NUMBER	DATE SAMPLED	GROSS ACTIVITY[a]	DATE ANALYZED
Central California Irrigation District			
6S-9E-18F1-M	8-17-63	9.5 ± 4.8	11-07-63
7S-8E-12P1-M	8- 6-63	10.3 ± 4.8	11-12-63
7S-8E-13F1-M	8- 6-63	13.0 ± 4.8	11-12-63
7S-8E-23R1-M	8- 6-63	4.0 ± 4.6	11-07-63
7S-9E-32H1-M	8- 6-63	1.7 ± 4.6	11-07-63
8S-9E-16E1-M	7-23-63	5.8 ± 4.6	11-07-63
9S-9E-5B1-M	7-23-63	0 ± 4.6	11-07-63
9S-13E-31D1-M	7-18-63	0.6 ± 4.6	11-07-63
10S-10E-28D1-M	7-23-63	3.1 ± 4.7	11-07-63
10S-12E-25L-M	7-18-63	4.0 ± 4.6	11-07-63
10S-12E-27K1-M	7-23-63	0 ± 4.5	11-07-63
10S-12E-35K1-M	7-23-63	3.2 ± 4.6	11-07-63
11S-10E-23K1-M	8-16-63	9.0 ± 4.7	11-07-63
11S-12E-13J1-M	7-23-63	0.3 ± 4.6	11-07-63
11S-13E-17F1-M	7-23-63	2.2 ± 4.6	11-07-63
11S-13E-36B1-M	7-23-63	9.5 ± 4.7	11-07-63
12S-14E-29B1-M	7-23-63	7.0 ± 4.7	11-07-63
13S-15E-18L1-M	7-23-63	7.1 + 4.6	11-07-63

a PICOCURIES PER LITER

Table E-3

QUALITY OF GROUND WATERS IN CALIFORNIA

RADIOASSAY OF GROUND WATER

1963

WELL NUMBER	DATE SAMPLED	GROSS ACTIVITY[a]	DATE ANALYZED
Oakdale Irrigation District			
1S-10E-33R1-M	8-19-63	9.3 ± 4.8	11-15-63
2S-10E-10D1-M	8-14-63	0 ± 4.6	11-26-63
2S-10E-27G1-M	8-14-63	0 + 4.7	11-26-63
3S-10E-13A1-M	6-28-63	7.6 ± 4.8	11-15-63
Modesto Irrigation District			
4S-10E-1D1-M	7-30-63	7.3 ± 4.8	11-26-63
Turlock Irrigation District			
4S-11E-5M1-M	9- 5-63	0 ± 4.7	11-26-63
Merced Irrigation District			
6S-11E-27K1-M	7- 1-63	1.3 ± 4.6	11-15-63
6S-11E-36P1-M	7- 9-63	0.9 ± 4.7	11-15-63
6S-12E-21N1-M	7- 9-63	4.2 ± 4.7	11-15-63
7S-11E-4M1-M	7- 2-63	45.9 ± 5.3	11-15-63
7S-12E-1Q1-M	9-10-63	0 ± 4.7	11-15-63
7S-12E-19A1-M	6-20-63	3.3 ± 4.7	11-15-63
7S-13E-4P1-M	7- 9-63	3.4 ± 4.7	11-15-63
7S-13E-22C1-M	7-23-63	6.1 ± 4.8	11-15-63
7S-14E-9R1-M	8- 8-63	1.6 ± 4.7	11-15-63
7S-14E-31M1-M	8- 8-63	6.6 ± 4.8	11-15-63
7S-15E-18K1-M	8- 7-63	7.9 ± 4.8	11-15-63
7S-15E-30E1-M	8- 7-63	6.4 ± 4.8	11-15-63
8S-14E-2D1-M	8-21-63	0 ± 4.6	11-15-63

a PICOCURIES PER LITER

Table E-3

QUALITY OF GROUND WATERS IN CALIFORNIA

RADIOASSAY OF GROUND WATER

1963

WELL NUMBER	DATE SAMPLED	GROSS ACTIVITY[a]	DATE ANALYZED
Delta-Mendota Area			
3S-7E-33C1-M	7-12-63	0 ± 4.7	11-26-63
5S-8E-8G1-M	8- 5-63	0 ± 4.6	11-26-63
5S-8E-27M1-M	8- 5-63	0 ± 4.7	11-26-63
8S-9E-12E1-M	7-23-63	6.7 ± 4.7	11-07-63
9S-9E-2L1-M	7-23-63	4.9 ± 4.6	11-07-63
9S-9E-21F1-M	7-23-63	0 ± 4.6	11-07-63
9S-10E-36R1-M	7-22-63	1.3 ± 4.6	11-07-63
Madera Irrigation District			
13S-17E-5P1-M	8-15-63	61.6 ± 5.6	9-18-63
West Chowchilla - Madera Area			
10S-13E-1A1-M	7-23-63	14.3 ± 4.7	11-07-63
13S-15E-22J1-M	8-19-63	10.2 ± 4.9	9-20-63
Fresno Irrigation District			
12S-20E-32J1-M	11-12-63	12.0 ± 4.7	11-12-63
12S-21E-31P1-M	7-11-63	3.7 ± 5.1	9-17-63
13S-17E-22B1-M	6-25-63	42.9 ± 5.6	9-17-63
13S-17E-29L1-M	6-20-63	25.3 ± 5.4	9-17-63
13S-19E-29E1-M	7-17-63	6.6 ± 4.8	9-18-63
13S-20E-27J1-M	6-26-63	10.6 ± 3.6	8-07-63
13S-21E-15N2-M	6-12-63	10.5 ± 4.7	11-12-63
13S-22E-28C2-M	7-11-63	2.4 ± 5.1	9-17-63
13S-23E-30J1-M	7-19-63	16.4 ± 4.8	11-12-63

a-PICOCURIES PER LITER

QUALITY OF GROUND WATERS IN CALIFORNIA

RADIOASSAY OF GROUND WATER

1963

WELL NUMBER	DATE SAMPLED	GROSS ACTIVITY[a]	DATE ANALYZED
Fresno Irrigation District (Continued)			
14S-17E-13H1-M	6-25-63	5.8 ± 5.1	9-17-63
14S-18E-26N1-M	6-25-63	20.0 ± 5.3	9-17-63
14S-19E-7M1-M	6-12-63	26.7 ± 4.9	11-12-63
14S-19E-14P1-M	6-12-63	9.3 ± 4.7	11-12-63
14S-19E-22R1-M	6-26-63	15.0 ± 3.7	8-07-63
14S-20E-27C1-M	6-12-63	12.8 ± 4.8	11-12-63
14S-21E-12P1-M	6-29-63	11.8 ± 3.7	8-07-63
Fresno Slough Area			
15S-17E-10R1-M	8-12-63	18.4 ± 5.2	9-18-63
15S-17E-34A1-M	8-12-63	5.2 ± 4.9	9-18-63
15S-18E-16G1-M	6-12-63	17.8 ± 4.8	11-12-63
15S-19E-35L1-M	8-12-63	13.5 ± 5.1	9-18-63
16S-17E-10G-M	8-26-63	68.5 ± 5.8	9-20-63
16S-18E-10A1-M	8-12-63	15.4 ± 5.0	9-19-63
Consolidated Irrigation District			
15S-21E-24L1-M	8-12-63	21.4 ± 5.2	9-18-63
Lower Kings River Area			
17S-18E-35Q1-M	8-26-63	0 ± 4.8	9-20-63
Orange Cove Irrigation District			
15S-24E-23K1-M	8-23-63	0 ± 4.8	9-18-63

a PICOCURIES PER LITER

Table E-3

QUALITY OF GROUND WATERS IN CALIFORNIA

RADIOASSAY OF GROUND WATER

1963

WELL NUMBER	DATE SAMPLED	GROSS ACTIVITY[a]	DATE ANALYZED
	Mendota-Huron Area		
13S-14E-15B1-M	8-26-63	8.7 ± 4.9	9-20-63
13S-14E-34M1-M	8-26-63	5.6 ± 4.9	9-20-63
14S-13E-12N1-M	8-13-63	3.0 ± 4.9	9-18-63
14S-13E-25N1-M	8-13-63	6.6 ± 4.9	9-18-63
14S-14E-9M-M	8-13-63	21.2 ± 5.2	9-18-63
14S-14E-33N1-M	8-26-63	9.0 ± 4.7	11-12-63
14S-15E-28L1-M	8-13-63	7.5 ± 5.0	9-18-63
15S-14E-36Q2-M	8-13-63	0 ± 4.8	9-18-63
15S-15E-20N2-M	8-13-63	5.0 ± 5.0	9-18-63
15S-15E-25N1-M	8-13-63	9.0 ± 5.1	9-18-63
16S-14E-10Q1-M	8-13-63	3.3 ± 4.6	11-12-63
16S-15E-8N1-M	8-13-63	7.1 ± 4.8	9-19-63
16S-15E-25Q1-M	8-26-63	13.8 ± 5.0	9-20-63
16S-16E-9N2-M	8-13-63	3.6 ± 4.8	9-19-63
17S-16E-18E1-M	8-22-63	0 ± 4.7	9-20-63
17S-17E-23Q1-M	8-22-63	3.9 ± 4.6	11-12-63
17S-17E-27R1-M	8-22-63	2.1 ± 4.9	9-20-63
17S-17E-28R1-M	8-22-63	7.1 ± 4.8	9-20-63
18S-15E-24N1-M	8-22-63	4.5 ± 4.9	9-20-63
18S-17E-13N1-M	8-22-63	0 ± 4.9	9-20-63
18S-17E-30P1-M	8-22-63	4.8 ± 4.9	9-20-63
19S-17E-13N1-M	8-22-63	6.8 ± 4.8	9-20-63
19S-18E-23D2-M	8-22-63	3.1 ± 4.9	9-20-63

a PICOCURIES PER LITER

Table E-3

QUALITY OF GROUND WATERS IN CALIFORNIA

RADIOASSAY OF GROUND WATER

1963

WELL NUMBER	DATE SAMPLED	GROSS ACTIVITY[a]	DATE ANALYZED
	Mendota-Huron Area (Continued)		
19S-18E-28E1-M	8-22-63	0.5 ± 4.9	9-20-63
20S-15E-25D2-M	8-23-63	3.3 ± 4.6	11-12-63
20S-17E-11N1-M	8-23-63	3.5 ± 4.9	9-20-63
20S-17E-36D1-M	8-23-63	5.1 ± 4.8	9-20-63
	San Luis Canal Company		
10S-12E-6K1-M	7-18-63	0 ± 4.6	11-07-63
	Stanislaus Plains		
1N-10E-17G-M	8-14-63	0 ± 4.8	11-26-63
1S-11E-36E1-M	6-28-63	0 ± 4.7	11-26-63
3S-11E-9D1-M	8-14-63	0 ± 4.7	11-26-63
3S-12E-26P1-M	6-28-63	15.7 ± 5.0	11-26-63
5S-12E-6D1-M	6-28-63	0 ± 4.6	11-26-63
	Merced Bottoms		
7S-10E-7M1-M	8-26-63	20.0 ± 4.9	11- 7-63
8S-14E-24A1-M	8-19-63	3.0 ± 4.7	11-15-63
	North Madera Plains		
9S-15E-24F1-M	8- 7-63	0 ± 5.0	9-17-63
	Centerville Bottoms		
14S-22E-25P1-M	8-12-63	2.6 ± 5.0	9-18-63

a PICOCURIES PER LITER

TABLE E-4

ANALYSES OF MISCELLANEOUS CONSTITUENTS

WELL LOCATION NUMBER	DATE	CONSTITUENTS IN PARTS PER MILLION (ppm)			
		ABS*	LITHIUM (Li)		
		Turlock Irrigation District			
4S/8E - 24A1-M	9/18/63	0.00			
		Delta Mendota Area			
8S/9E - 2P-M	6/27/63	0.00			
		Lower Kings River Area			
19S/19E - 25L-M	8/30/63	0.00			
		Orange Cove Irrigation District			
15S/24E - 23K1-M	8/23/63	0.00			
		Kaweah Delta Water Conservation District			
20S/26E - 3F1-M	8/28/63	0.00			
		Lindmore Irrigation District			
20S/27E - 31J1-M	9/ 5/63	0.00			
		Shafter-Wasco Irrigation District			
28S/26E - 30A1-M	6/20/63		0.0		
		Kern River Delta Area			
30S/24E - 14H1-M	6/13/63		0.0		
32S/27E - 16R1-M	3/13/63		0.0		

* Alkyl-Benzene-Sulfonate (Detergents)

TABLE E-4

ANALYSES OF MISCELLANEOUS CONSTITUENTS

WELL LOCATION NUMBER	DATE	CONSTITUENTS IN PARTS PER MILLION (ppm)			
		ABS*	LITHIUM (Li)		
Edison-Maricopa Area					
30S/29E - 20A1-M	6/11/63		0.0		
11N/20W - 8R1-S	7/ 2/63		0.0		
11N/20W - 25K1-S	7/ 2/63		0.0		
12N/21W - 33N1-S	6/12/63		0.0		
Avenal-McKittrick Area					
26S/18E - 1A-M	8/ 8/63		<3.8[1]		
27S/20E - 34G1-M	6/ 8/63		0.0		
Merced Bottoms					
8S/13E - 16H-M	7/18/63	0.00			
South Tulare Plains					
21S/27E - 27F1-M	9/ 5/63	0.44			
Kern Plains					
26S/27E - 9G1-M	6/11/63		0.2		
Centerville Bottoms					
14S/22E - 25P1-M	8/12/63	0.00			

* Alkyl-Benzene-Sulfonate (Detergents)

< Less than amount indicated.

1 Approximation due to interference in determination.

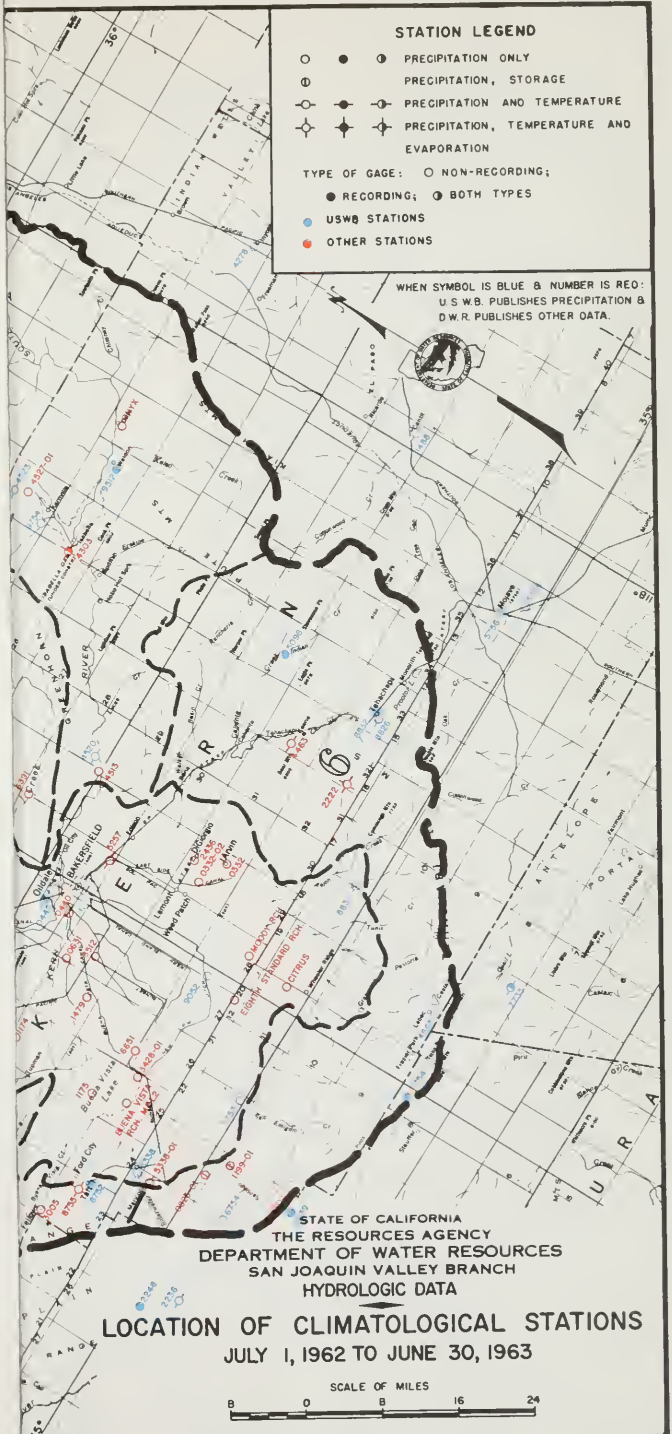
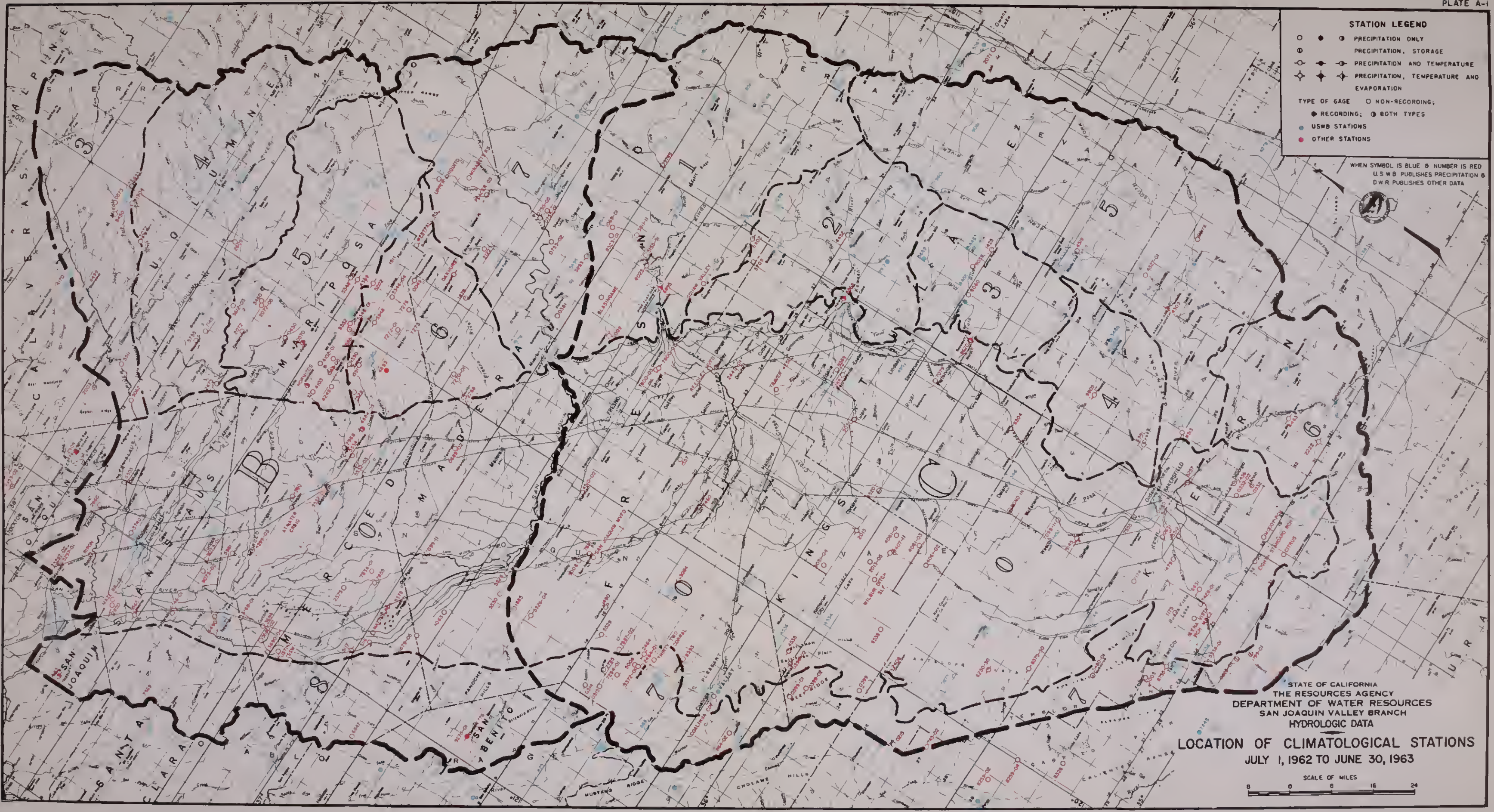
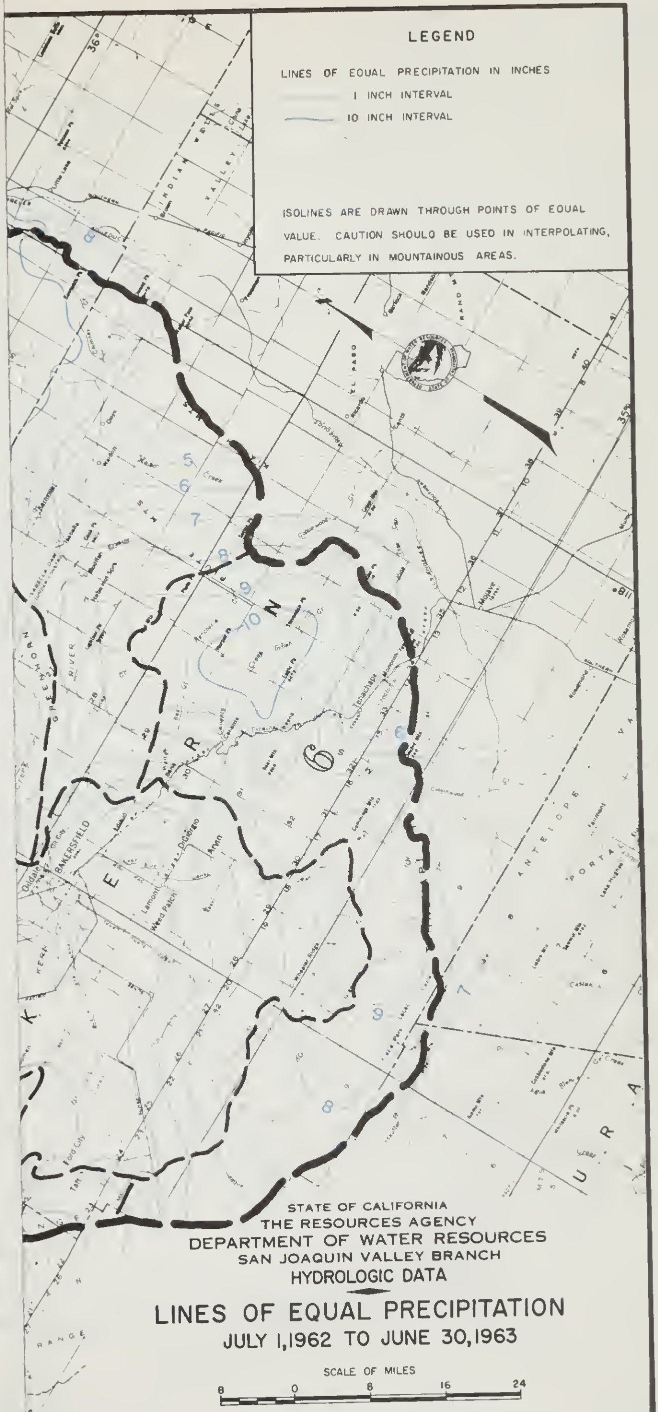

STATION LEGEND
PRECIPITATION ONLY
PRECIPITATION, STORAGE
PRECIPITATION AND TEMPERATURE
PRECIPITATION, TEMPERATURE AND EVAPORATION
TYPE OF GAGE: O NON-RECORDING; ● RECORDING; ◑ BOTH TYPES
USWB STATIONS
OTHER STATIONS
WHEN SYMBOL IS BLUE & NUMBER IS RED: U.S.W.B. PUBLISHES PRECIPITATION & D.W.R. PUBLISHES OTHER DATA.
KERN
BAKERSFIELD
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
HYDROLOGIC DATA
LOCATION OF CLIMATOLOGICAL STATIONS
JULY 1, 1962 TO JUNE 30, 1963
SCALE OF MILES
8 0 8 16 24

PLATE A-1


STATION LEGEND
PRECIPITATION ONLY
PRECIPITATION, STORAGE
PRECIPITATION AND TEMPERATURE
PRECIPITATION, TEMPERATURE AND EVAPORATION
TYPE OF GAGE ○ NON-RECORDING;
● RECORDING; ◑ BOTH TYPES
USWB STATIONS
OTHER STATIONS
WHEN SYMBOL IS BLUE & NUMBER IS RED
U.S.W.B. PUBLISHES PRECIPITATION &
D.W.R. PUBLISHES OTHER DATA
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
HYDROLOGIC DATA
LOCATION OF CLIMATOLOGICAL STATIONS
JULY 1, 1962 TO JUNE 30, 1963
SCALE OF MILES
8 0 8 16 24

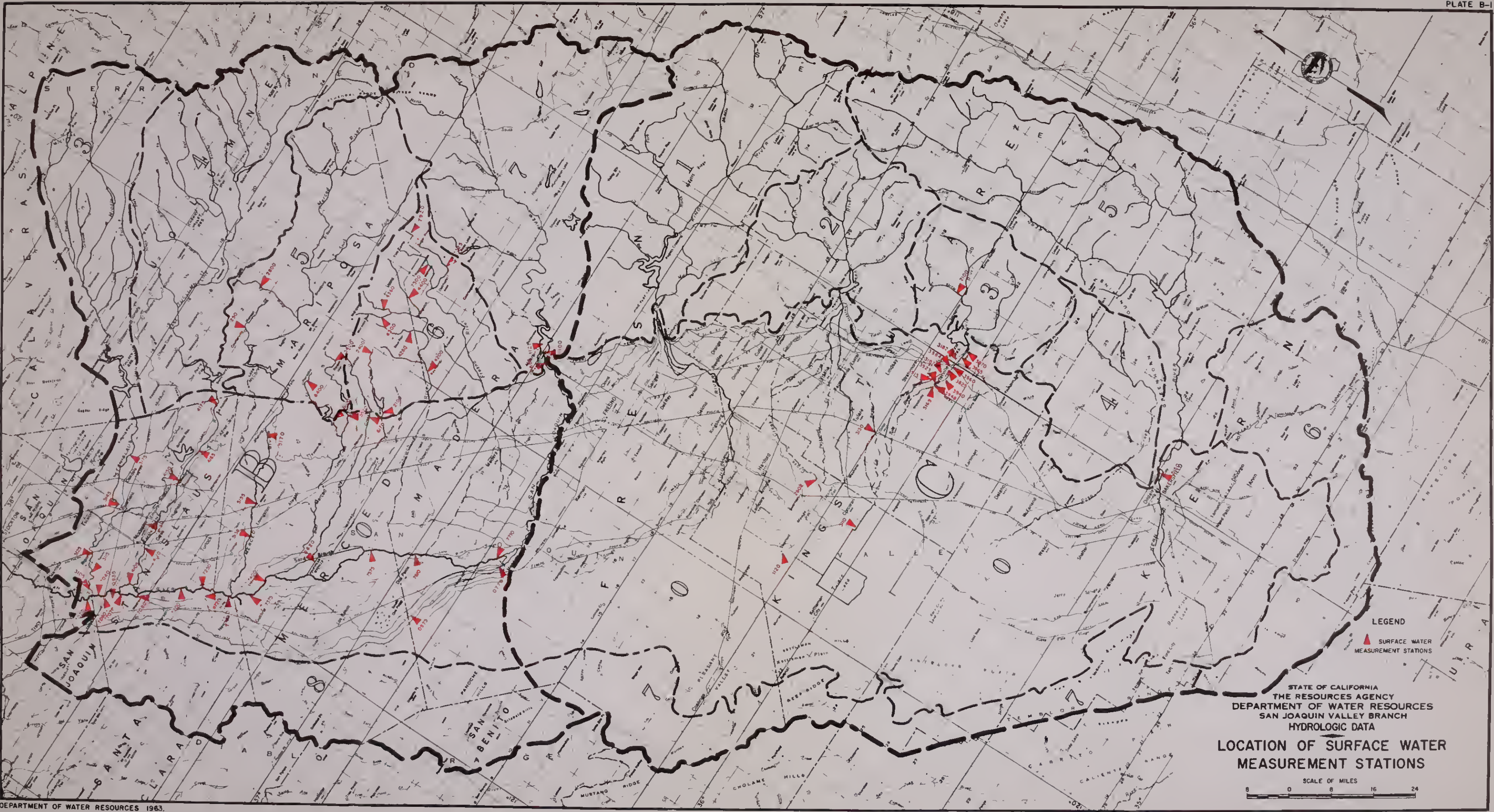


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
HYDROLOGIC DATA

LINES OF EQUAL PRECIPITATION
JULY 1,1962 TO JUNE 30,1963

PLATE A-2

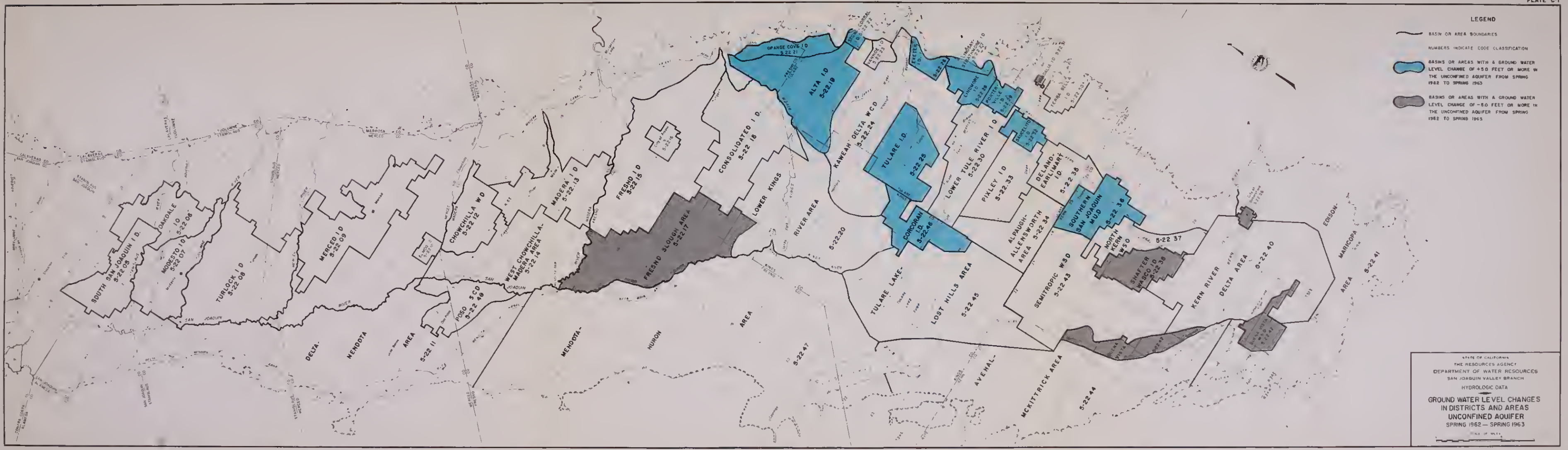

LEGEND
LINES OF EQUAL PRECIPITATION IN INCHES
1 INCH INTERVAL
10 INCH INTERVAL
ISOLINES ARE DRAWN THROUGH POINTS OF EQUAL VALUE. CAUTION SHOULD BE USED IN INTERPOLATING, PARTICULARLY IN MOUNTAINOUS AREAS
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
HYDROLOGIC DATA
LINES OF EQUAL PRECIPITATION
JULY 1,1962 TO JUNE 30,1963
SCALE OF MILES
8 0 8 16 24



STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
HYDROLOGIC DATA

LOCATION OF SURFACE WATER MEASUREMENT STATIONS

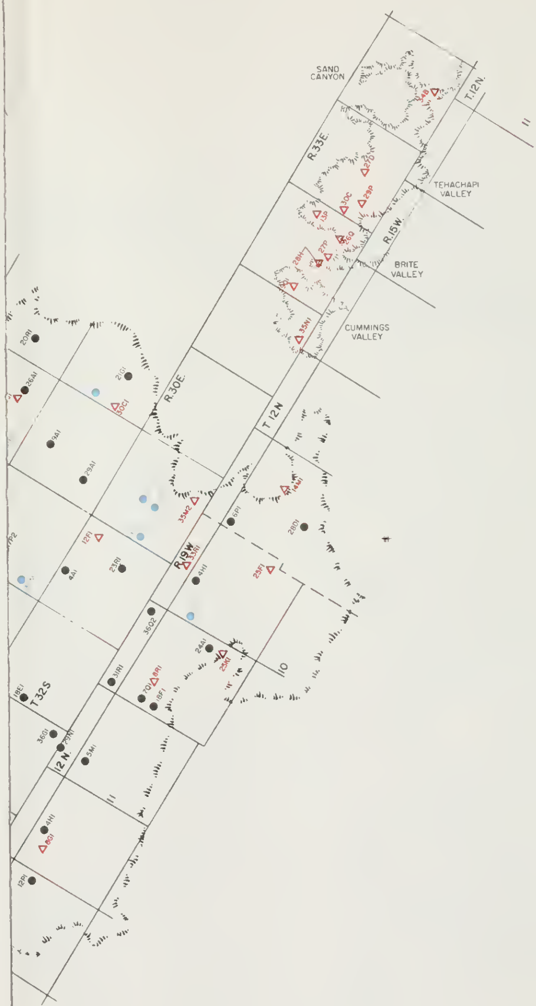
PLATE C-1


LEGEND
BASIN OR AREA BOUNDARIES
NUMBERS INDICATE CODE CLASSIFICATION
BASINS OR AREAS WITH A GROUND WATER LEVEL CHANGE OF +5.0 FEET OR MORE IN THE UNCONFINED AQUIFER FROM SPRING 1962 TO SPRING 1963
BASINS OR AREAS WITH A GROUND WATER LEVEL CHANGE OF -5.0 FEET OR MORE IN THE UNCONFINED AQUIFER FROM SPRING 1962 TO SPRING 1963
SOUTH SAN JOAQUIN I.D. 5-22.05
OAKDALE I.D. 5-22.06
MODESTO I.D. 5-22.07
TURLOCK I.D. 5-22.08
MERCED I.D. 5-22.09
CHOWCHILLA W.D. 5-22.12
WEST CHOWCHILLA-MADERA AREA 5-22.14
MADERA I.D. 5-22.13
FRESNO I.D. 5-22.15
FRESNO SLOUGH AREA 5-22.17
CONSOLIDATED I.D. 5-22.18
LOWER KINGS RIVER AREA 5-22.20
ORANGE COVE I.D. 5-22.21
ALTA I.D. 5-22.19
KAWEAH DELTA W.C.D. 5-22.24
TULARE I.D. 5-22.25
CORCORAN I.D. 5-22.46
LOWER TULE RIVER I.D. 5-22.30
PIXLEY I.D. 5-22.33
DELANO-EARLIMART I.D. 5-22.35
ALPAUGH-ALLENSWORTH AREA 5-22.34
SOUTHERN SAN JOAQUIN M.U.D. 5-22.36
NORTH KERN W.S.D. 5-22.37
SHAFTER WASCO I.D. 5-22.38
SEMITROPIC W.S.D. 5-22.43
KERN RIVER DELTA AREA 5-22.40
EDISON-MARICOPA AREA 5-22.41
TULARE LAKE-LOST HILLS AREA 5-22.45
DELTA-MENDOTA AREA 5-22.11
POSO S.C.D. 5-22.49
MENDOTA-HURON AREA 5-22.47
AVENAL-MCKITTRICK AREA 5-22.44
SAN JOAQUIN RIVER
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
HYDROLOGIC DATA
GROUND WATER LEVEL CHANGES IN DISTRICTS AND AREAS UNCONFINED AQUIFER
SPRING 1962 — SPRING 1963


LEGEND
BASIN OR AREA BOUNDARIES
NUMBERS INDICATE CODE CLASSIFICATION
BASINS OR AREAS WITH A GROUND WATER LEVEL CHANGE OF +5.0 FEET OR MORE IN THE CONFINED OR SEMICONFINED AQUIFER FROM SPRING 1962 TO SPRING 1963
BASINS OR AREAS WITH A GROUND WATER LEVEL CHANGE OF −5.0 FEET OR MORE IN THE CONFINED OR SEMICONFINED AQUIFER FROM SPRING 1962 TO SPRING 1963
SOUTH SAN JOAQUIN I.D. 5-22.05
OAKDALE I.D. 5-22.06
MODESTO I.D. 5-22.07
TURLOCK I.D. 5-22.08
MERCED I.D. 5-22.09
CHOWCHILLA W.D. 5-22.12
MADERA I.D. 5-22.13
WEST CHOWCHILLA-MADERA AREA 5-22.14
FRESNO I.D. 5-22.15
FRESNO SLOUGH AREA 5-22.17
CONSOLIDATED I.D. 5-22.18
ALTA I.D. 5-22.19
ORANGE COVE I.D. 5-22.21
LOWER KINGS RIVER AREA 5-22.20
KAWEAH DELTA W.C.D. 5-22.24
TULARE I.D. 5-22.25
LOWER TULE RIVER I.D. 5-22.30
PIXLEY I.D. 5-22.33
DELANO-EARLIMART I.D. 5-22.35
ALPAUGH-ALLENSWORTH AREA 5-22.34
SOUTHERN SAN JOAQUIN M.U.D. 5-22.36
NORTH KERN W.S.D.
5-22.37
SHAFTER WASCO I.D. 5-22.38
SEMITROPIC W.S.D. 5-22.43
KERN RIVER DELTA AREA 5-22.40
MARICOPA AREA 5-22.41
CORCORAN I.D. 5-22.46
TULARE LAKE
LOST HILLS AREA 5-22.45
AVENAL-MCKITTRICK AREA 5-22.44
MENDOTA-HURON AREA 5-22.47
DELTA-MENDOTA AREA 5-22.11
POSO S.C.D. 5-22.48
SAN JOAQUIN RIVER
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
HYDROLOGIC DATA
GROUND WATER LEVEL CHANGES
IN DISTRICTS AND AREAS
CONFINED AND SEMICONFINED AQUIFER
SPRING 1962 — SPRING 1963

LEGEND

- WELLS MEASURED MONTHLY
- WELLS MEASURED ANNUALLY AND SEMI-ANNUALLY
- GROUND WATER QUALITY MONITERING WELLS



STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA

LOCATION OF SELECTED OBSERVATION WELLS
1962-1963

SCALE OF MILES
6 0 6 12

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA

LOCATION OF SELECTED OBSERVATION WELLS 1962-1963

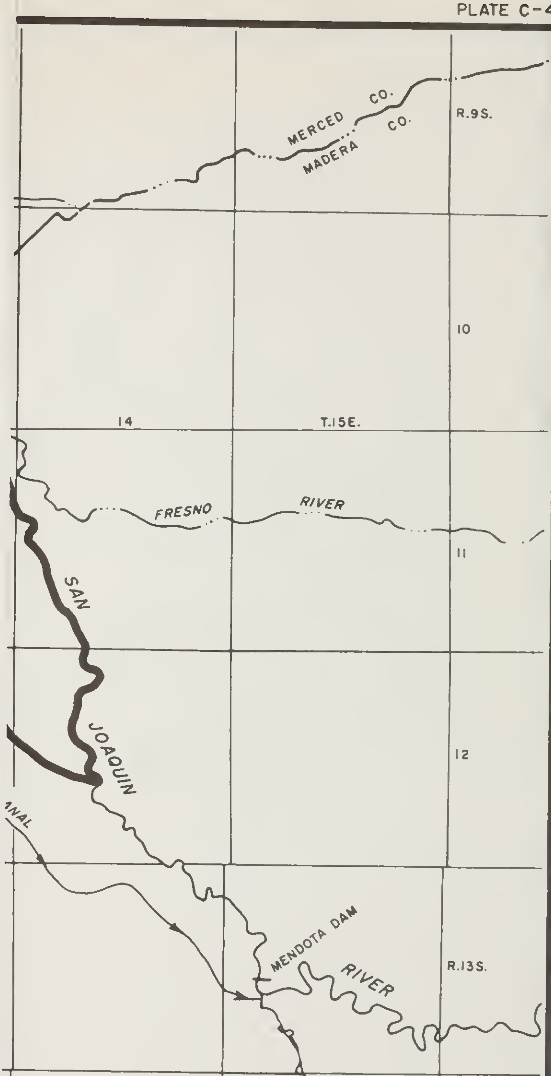
CALAVERAS CO
SAN JOAQUIN CO
CALAVERAS
STANISLAUS
TUOLUMNE
STANISLAUS
MARIPOSA
MERCED
MARIPOSA
MADERA
STANISLAUS
SAN JOAQUIN
STANISLAUS
MERCED
MERCED
MADERA
MADERA
FRESNO
FRESNO CO.
TULARE CO.
KINGS
FRESNO
SAN JOAQUIN
ALAMEDA
CONTRA COSTA
ALAMEDA
SAN JOAQUIN
STANISLAUS
MERCED
FRESNO
AQUEDUCT
HETCH HETCHY
MOKELUMNE
Calaveras
Stockton
Tracy
Modesto
Turlock
Merced
Dos Palos
Los Banos
Madera
City of Fresno
Sanger
Clovis
Coalinga
Millerton Lake
RIVER
TUOLUMNE
SAN JOAQUIN
Chowchilla
Fresno
KINGS
CANAL
FRIANT
KERN
MADERA
DELTA
MENDOTA
MENDOTA DAM
BETA
MAIN
FRESNO
SLOUGH
PANOCHE VALLEY
T1N
T1S
R1E

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA

LOCATION OF SELECTED OBSERVATION WELLS 1962-1963

SCALE OF MILES
6 0 6 12

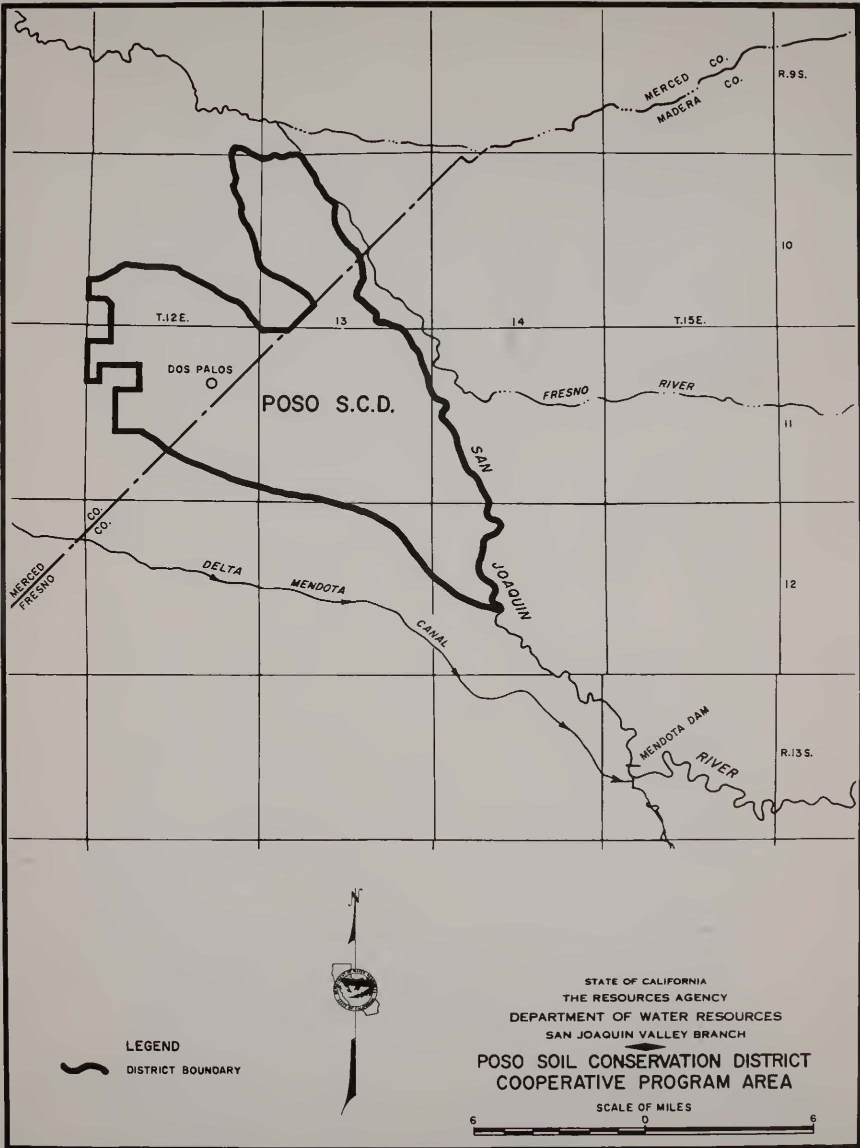


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

POSO SOIL CONSERVATION DISTRICT COOPERATIVE PROGRAM AREA

SCALE OF MILES

6 0 6



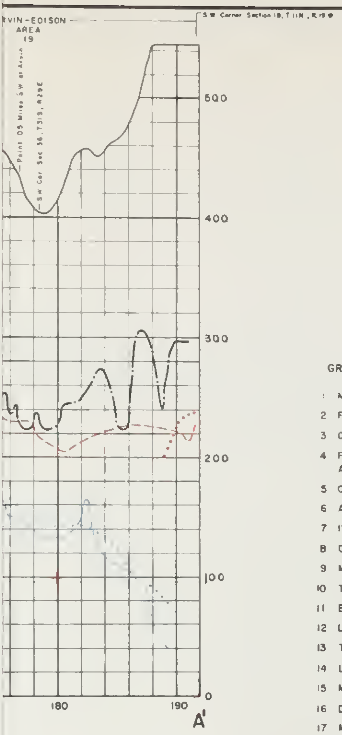
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

POSO SOIL CONSERVATION DISTRICT
COOPERATIVE PROGRAM AREA

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

KERN COUNTY
COOPERATIVE PROGRAM
AREA

SCALE OF MILES
6 0 6



HISTORIC GROUND WATER AREAS

1 MADERA
2 FRESNO
3 CONSOLIDATED
4 FRESNO(2) CONSOLIDATED(3) AND OUTSIDE AREA (4a, 4b, & 4c)
5 CENTERVILLE BOTTOMS
6 ALTA
7 IVANHOE
8 OUTSIDE IVANHOE
9 MILL CREEK
10 TULARE
11 ELK BAYOU
12 LINDSAY-EXETER
13 TULE RIVER
14 LOWER DEER CREEK
15 MIDDLE DEER CREEK
16 DELANO-EARLIMART
17 Mc FARLAND-SHAFTER
18 ROSEDALE
19 ARVIN-EDISON

LEGEND

GROUND WATER AREA BOUNDARIES
GROUND WATER LEVEL FALL 1921
GROUND WATER LEVEL FALL 1951
GROUND WATER LEVEL SPRING 1962, UNCONFINED AQUIFER
GROUND WATER LEVEL SPRING 1962, PRESSURE SURFACE
GROUND WATER LEVEL SPRING 1963, UNCONFINED AQUIFER
GROUND WATER LEVEL SPRING 1963, PRESSURE SURFACE

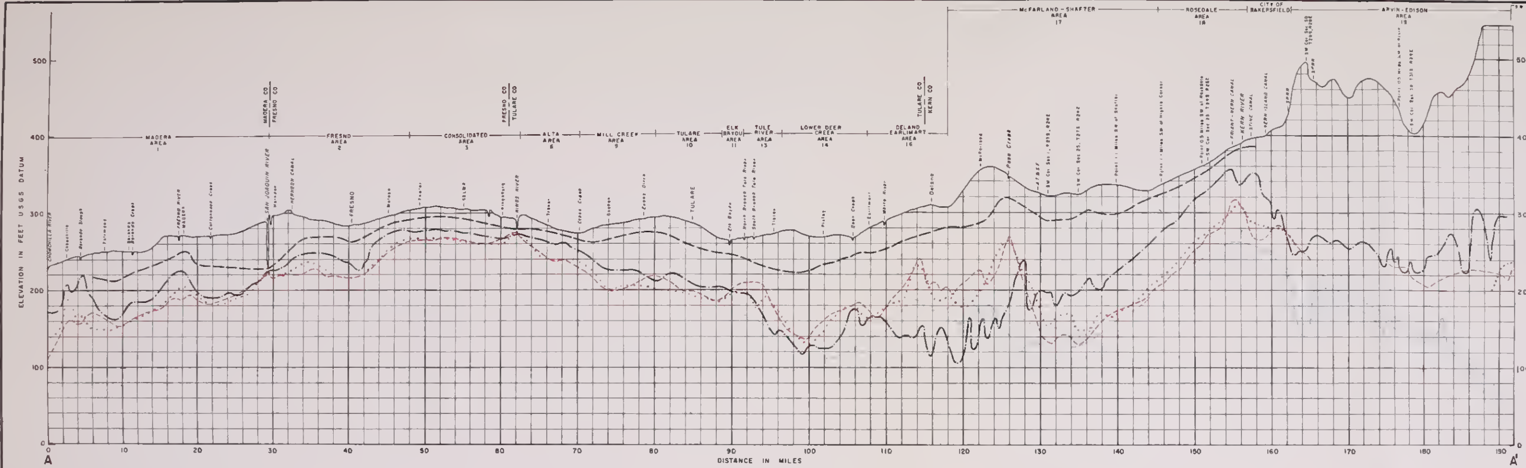
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA

MAP OF 19 HISTORIC GROUND WATER AREAS IN SAN JOAQUIN VALLEY AND PROFILES ALONG SECTION A-A' SHOWING GROUND WATER LEVELS IN 1921, 1951, 1962 & 1963

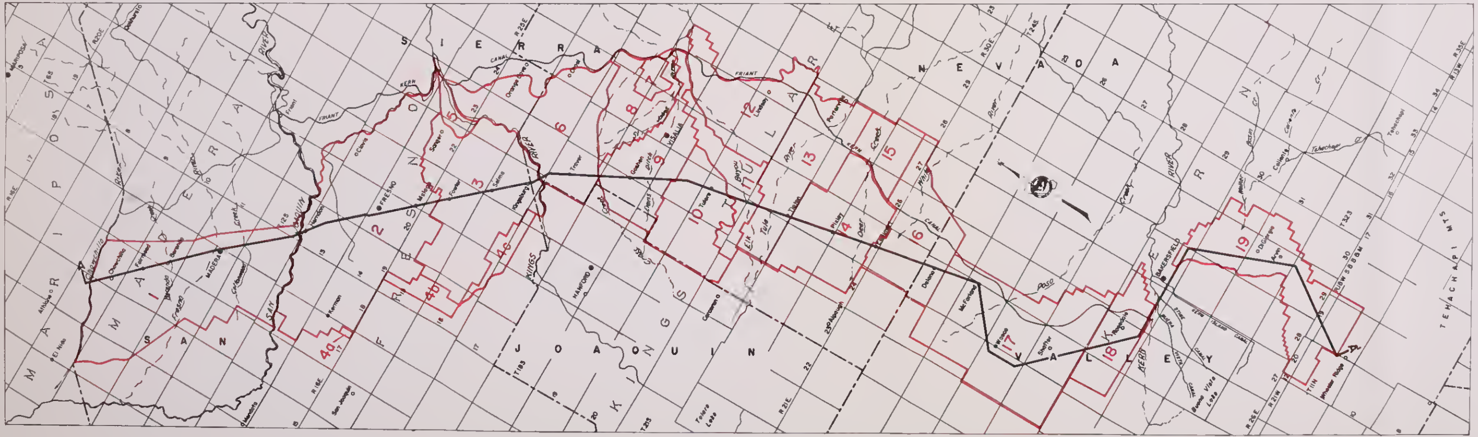
SCALE OF MILES

5 0 5 10



HISTORIC GROUND WATER AREAS

1 MADERA
2 FRESNO
3 CONSOLIDATED
4 FRESNO(2) CONSOLIDATED(3) AND OUTSIDE AREA (4a, 4b, & 4c)
5 CENTERVILLE BOTTOMS
6 ALTA
7 IVANHOE
8 OUTSIDE IVANHOE
9 MILL CREEK
10 TULARE
11 ELK BAYOU
12 LINDSAY-EXETER
13 TULE RIVER
14 LOWER DEER CREEK
15 MIDDLE DEER CREEK
16 DELANO-EARLIMART
17 Mc FARLAND-SHAFTER
18 ROSEDALE
19 ARVIN-EDISON



LEGEND

GROUND WATER AREA BOUNDARIES
GROUND WATER LEVEL FALL 1921
GROUND WATER LEVEL FALL 1951
GROUND WATER LEVEL SPRING 1962, UNCONFINED AQUIFER
GROUND WATER LEVEL SPRING 1962, PRESSURE SURFACE
GROUND WATER LEVEL SPRING 1963, UNCONFINED AQUIFER
GROUND WATER LEVEL SPRING 1963, PRESSURE SURFACE

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

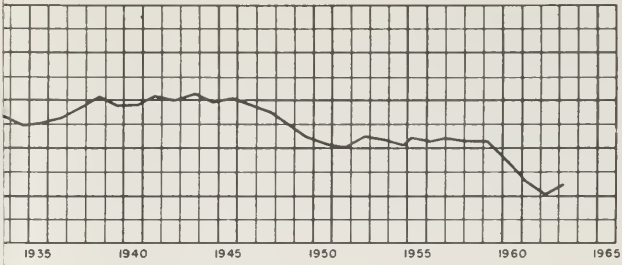
HYDROLOGIC DATA

MAP OF 19 HISTORIC GROUND WATER AREAS IN SAN JOAQUIN VALLEY AND PROFILES ALONG SECTION A-A' SHOWING GROUND WATER LEVELS IN 1921, 1951, 1962 & 1963

SCALE OF MILES

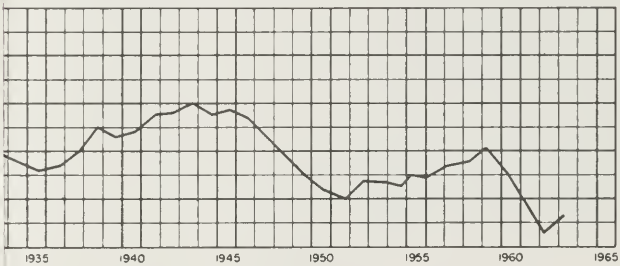
MILL CREEK GROUND WATER AREA

AREA 128.25 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 305'



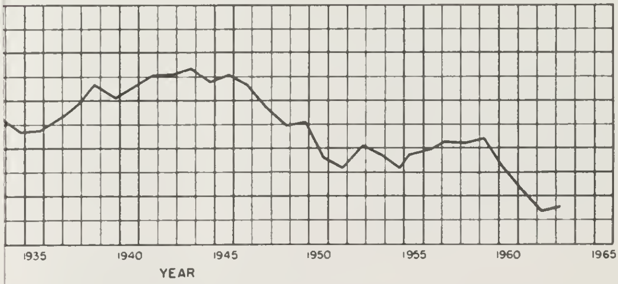
TULARE GROUND WATER AREA

AREA 121.07 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 363'



ELK BAYOU GROUND WATER AREA

AREA 67.6 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 295'



ELEVATION IN FEET - U.S.G.S. DATUM

OUND

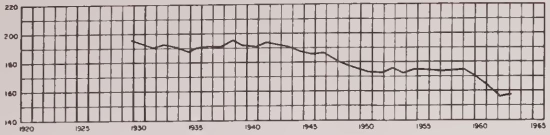
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962-1963

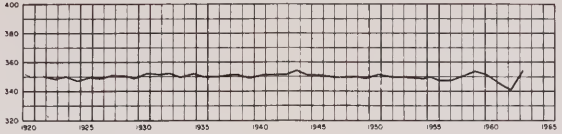
FLUCTUATION OF AVERAGE WATER LEVEL, 1921 TO 1963 IN 19 HISTORIC GROUND WATER AREAS IN SAN JOAQUIN VALLEY

ELEVATION IN FEET — USGS DATUM

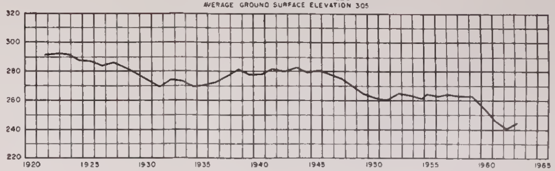
MADERA GROUND WATER AREA
AREA 342.6 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 230'



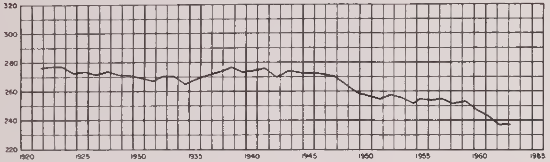
CENTERVILLE BOTTOMS GROUND WATER AREA
AREA 18.15 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 363'



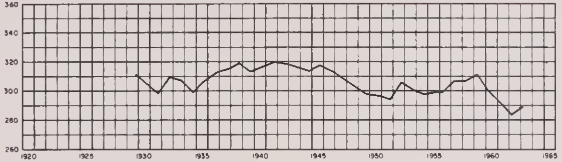
MILL CREEK GROUND WATER AREA
AREA 128.25 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 305



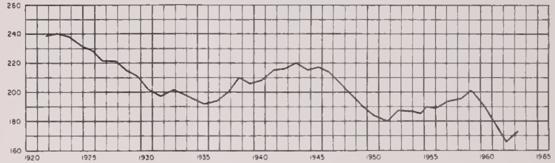
FRESNO GROUND WATER AREA
AREA 404.0 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 291'



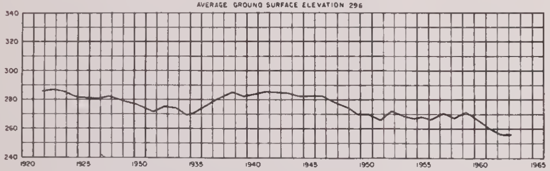
ALTA GROUND WATER AREA
AREA 190.93 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 331'



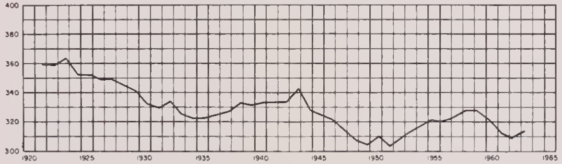
TULARE GROUND WATER AREA
AREA 121.07 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 353'



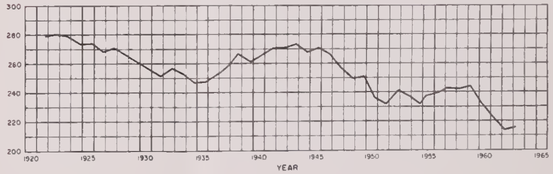
CONSOLIDATED GROUND WATER AREA
AREA 243.0 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 296



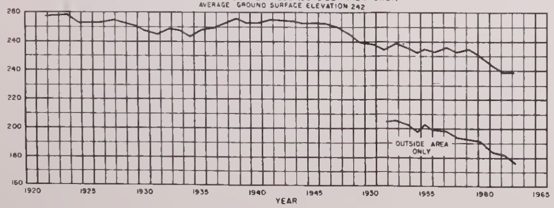
IVANHOE GROUND WATER AREA
AREA 17.37 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 383'



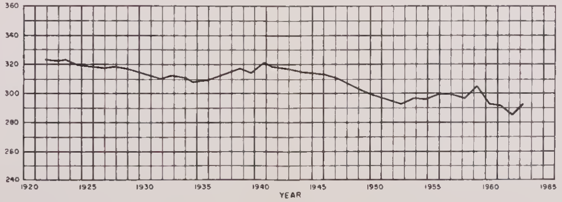
ELK BAYOU GROUND WATER AREA
AREA 67.6 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 295'



FRESNO-CONSOLIDATED OUTSIDE GROUND WATER AREA
AREA 700.11 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 289
AREA 53.11 SQUARE MILES (OUTSIDE AREA ONLY)
AVERAGE GROUND SURFACE ELEVATION 242



OUTSIDE IVANHOE GROUND WATER AREA
AREA 76.65 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 345'



ELEVATION IN FEET — USGS DATUM

NOTE: SEE PLATE C-6 FOR GROUND WATER AREA LOCATION

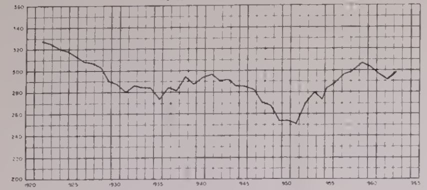
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962—1963

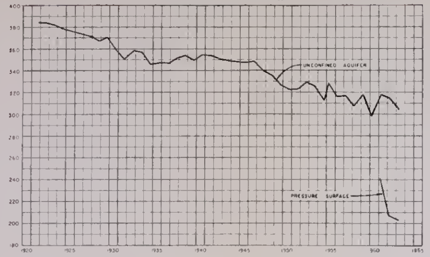
FLUCTUATION OF AVERAGE WATER LEVEL, 1921 TO 1963 IN 19 HISTORIC GROUND WATER AREAS IN SAN JOAQUIN VALLEY

ELEVATION IN FEET - USGS DATUM

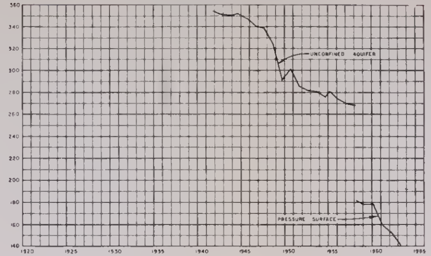
LINDSAY-EXETER GROUND WATER AREA
AREA 136.43 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 377



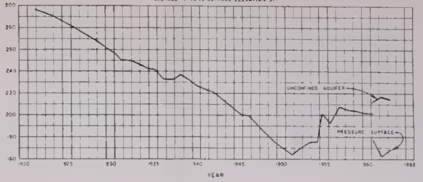
MIDDLE DEER CREEK GROUND WATER AREA
AREA 54.28 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 480



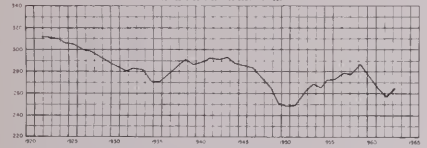
ARVIN-EDISON GROUND WATER AREA
AREA 205.18 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 545



DELANO-EARLIMART GROUND WATER AREA
AREA 140.0 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 371

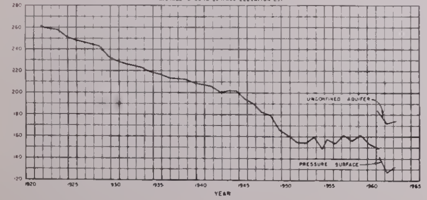


TULE RIVER GROUND WATER AREA
AREA 156.6 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 339

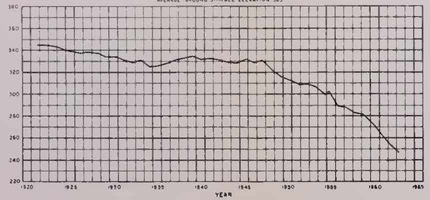


NOTE: SEE PLATE C-6 FOR GROUND WATER AREA LOCATION

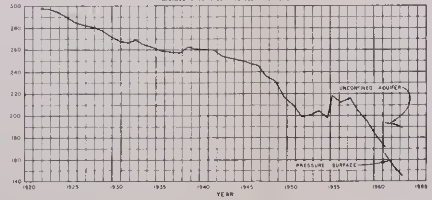
LOWER DEER CREEK GROUND WATER AREA
AREA 162.22 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 297



ROSEDALE GROUND WATER AREA
AREA 78.88 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 363



Mc FARLAND-SHAFTER GROUND WATER AREA
AREA 306.0 SQUARE MILES
AVERAGE GROUND SURFACE ELEVATION 340

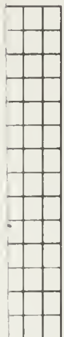


ELEVATION IN FEET - USGS DATUM

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962-1963

FLUCTUATION OF AVERAGE WATER LEVEL, 1921 TO 1963 IN 19 HISTORIC GROUND WATER AREAS IN SAN JOAQUIN VALLEY



ELEVATION IN FEET - USGS DATUM

LEGEND

— — — — CONNECTS MEASUREMENTS MADE AT INTERVALS OF ONE YEAR OR MORE

——— ——— GROUND LEVEL

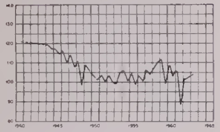
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962–1963

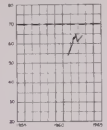
FLUCTUATION OF WATER LEVEL IN SELECTED WELLS IN SAN JOAQUIN VALLEY

ELEVATION IN FEET - USGS DATUM

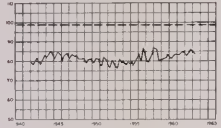
SAN JOAQUIN VALLEY (5-22.00)
OAKDALE IRRIGATION DISTRICT (5-22.06)
WELL 2S/10E-33J1, M.D.B.&M.
GROUND SURFACE ELEVATION 167



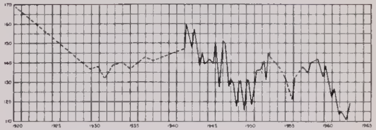
SAN JOAQUIN VALLEY (5-22.00)
TURLOCK IRRIGATION DISTRICT (5-22.08)
WELL 5S/9E-30Z, M.D.B.&M.
GROUND SURFACE ELEVATION 70'



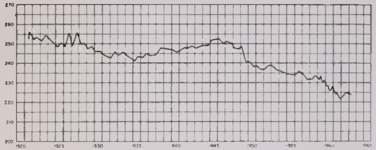
SAN JOAQUIN VALLEY (5-22.00)
DELTA-MENDOTA AREA-SHALLOW ZONE (5-22.11)
WELL 3S/6E-18N1, M.D.B.&M.
GROUND SURFACE ELEVATION 99



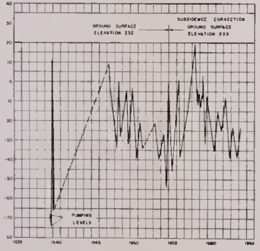
SAN JOAQUIN VALLEY (5-22.00)
CHOWCHILLA WATER DISTRICT (5-22.12)
WELL 10S/15E-23K1, M.D.B.&M.
GROUND SURFACE ELEVATION 194



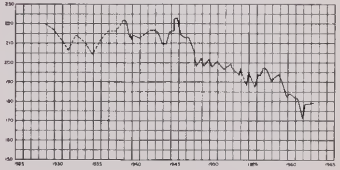
SAN JOAQUIN VALLEY (5-22.00)
FRESNO IRRIGATION DISTRICT (5-22.15)
WELL 13S/19E-9D1, M.D.B.&M.
GROUND SURFACE ELEVATION 286



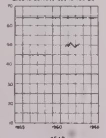
SAN JOAQUIN VALLEY (5-22.00)
DELTA-MENDOTA AREA-DEEP ZONE (5-22.11)
WELL 13S/13E-15R1, M.D.B.&M.
GROUND SURFACE ELEVATION 232



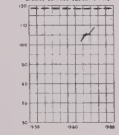
SAN JOAQUIN VALLEY (5-22.00)
MADERA IRRIGATION DISTRICT (5-22.13)
WELL 11S/17E-27C1, M.D.B.&M.
GROUND SURFACE ELEVATION 251



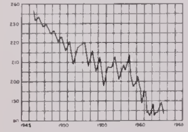
SAN JOAQUIN VALLEY (5-22.00)
MODESTO IRRIGATION DISTRICT (5-22.07)
WELL 3S/8E-22C2, M.D.B.&M.
GROUND SURFACE ELEVATION 64



SAN JOAQUIN VALLEY (5-22.00)
MERCED IRRIGATION DISTRICT (5-22.09)
WELL 7S/11E-1H1, M.D.B.&M.
GROUND SURFACE ELEVATION 118



SAN JOAQUIN VALLEY (5-22.00)
CONSOLIDATED IRRIGATION DISTRICT (5-22.18)
WELL 16S/20E-22N1, M.D.B.&M.
GROUND SURFACE ELEVATION 247



LEGEND

- - - - CONNECTS MEASUREMENTS MADE AT INTERVALS OF ONE YEAR OR MORE
—— —— GROUND LEVEL

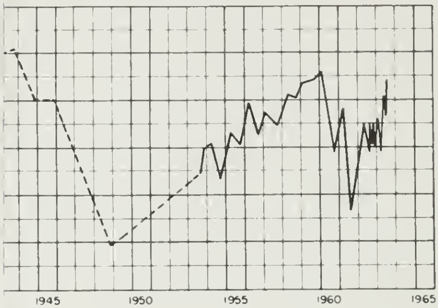
ELEVATION IN FEET - USGS DATUM

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962-1963

FLUCTUATION OF WATER LEVEL
IN SELECTED WELLS IN SAN JOAQUIN VALLEY

N JOAQUIN VALLEY (5-22.00)
TER IRRIGATION DISTRICT (5-22.26)
WELL 18S/27E-29D1, M.D.B.&M.
GROUND SURFACE ELEVATION 446'



YEAR

ELEVATION IN FEET - U.S.G.S. DATUM

LEGEND

— — CONNECTS MEASUREMENTS MADE AT INTERVALS OF ONE YEAR OR MORE

——— GROUND LEVEL

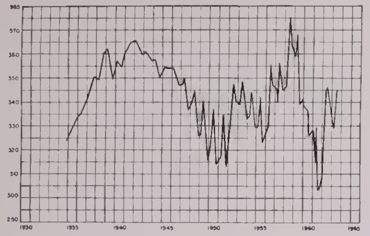
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962-1963

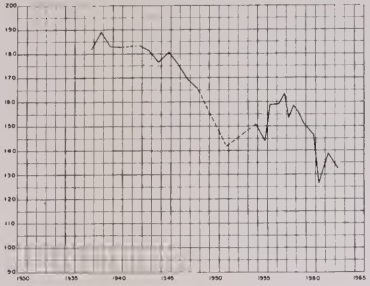
FLUCTUATION OF WATER LEVEL
SELECTED WELLS IN SAN JOAQUIN VALLEY

ELEVATION IN FEET - USGS DATUM

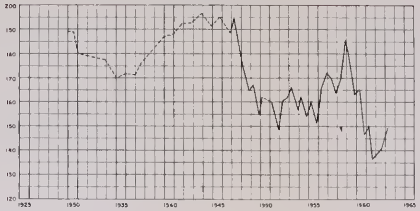
SAN JOAQUIN VALLEY (5-22.00)
ALTA IRRIGATION DISTRICT (5-22 19)
WELL 15S/24E-22D1 M D B & M
GROUND SURFACE ELEVATION 348



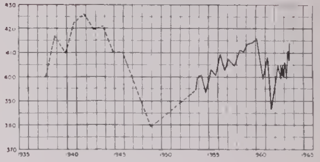
SAN JOAQUIN VALLEY (5-22.00)
FRESNO SLOUGH AREA (5-22 17)
WELL 17S/18E-23A2, M D B & M
GROUND SURFACE ELEVATION 200'



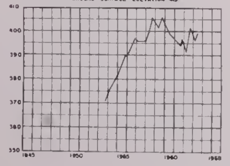
SAN JOAQUIN VALLEY (5-22.00)
TULARE IRRIGATION DISTRICT (5-22 25)
WELL 20S/23E-9J1, MDB&M
GROUND SURFACE ELEVATION 246'



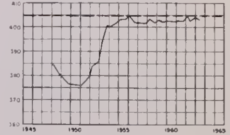
SAN JOAQUIN VALLEY (5-22.00)
EXETER IRRIGATION DISTRICT (5-22 26)
WELL 18S/27E-29D1, M D B & M
GROUND SURFACE ELEVATION 448



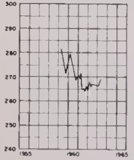
SAN JOAQUIN VALLEY (5-22.00)
ORANGE COVE IRRIGATION DISTRICT (5-22 21)
WELL 16S/25E-4C2, M D B & M
GROUND SURFACE ELEVATION 415



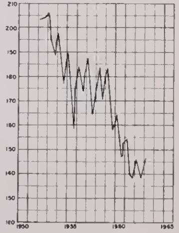
SAN JOAQUIN VALLEY (5-22.00)
STONE CORRAL IRRIGATION DISTRICT (5-22 22)
WELL 16S/26E-32R1, M D B & M
GROUND SURFACE ELEVATION 405



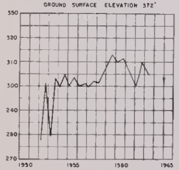
SAN JOAQUIN VALLEY (5-22.00)
IVANHOE IRRIGATION DISTRICT (5-22 23)
WELL 17S/25E-35M1, M D B & M
GROUND SURFACE ELEVATION 349



SAN JOAQUIN VALLEY (5-22.00)
KAWEAH DELTA WATER CONSERVATION DISTRICT (5-22 24)
WELL 19S/22E-19A2, M D B & M
GROUND SURFACE ELEVATION 235



SAN JOAQUIN VALLEY (5-22.00)
LINDSAY-STRATHMORE IRRIGATION DISTRICT (5-22 27)
WELL 20S/27E-6B1 M D B & M
GROUND SURFACE ELEVATION 372'



LEGEND

- - - - CONNECTS MEASUREMENTS MADE AT INTERVALS OF ONE YEAR OR MORE
—— —— GROUND LEVEL

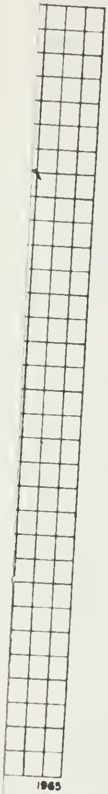
ELEVATION IN FEET - USGS DATUM

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

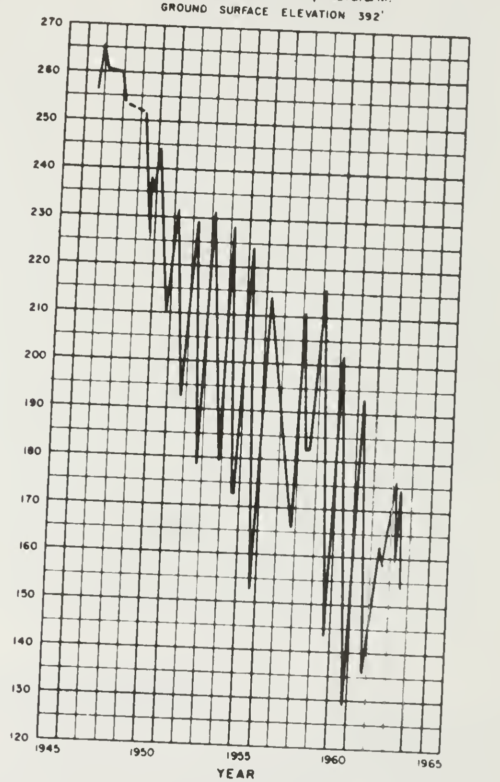
HYDROLOGIC DATA 1962-1963

FLUCTUATION OF WATER LEVEL
IN SELECTED WELLS IN SAN JOAQUIN VALLEY

22.36)



SAN JOAQUIN VALLEY (5-22.00)
NORTH KERN WATER STORAGE DISTRICT (5-22.37)
WELL 27S/25E-22A1, M.D.B.&M.
GROUND SURFACE ELEVATION 392'

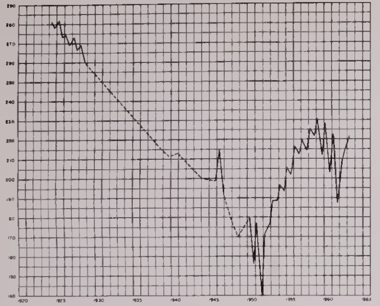


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

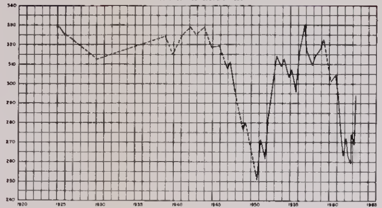
HYDROLOGIC DATA 1962–1963

FLUCTUATION OF WATER LEVEL
IN SELECTED WELLS IN SAN JOAQUIN VALLEY

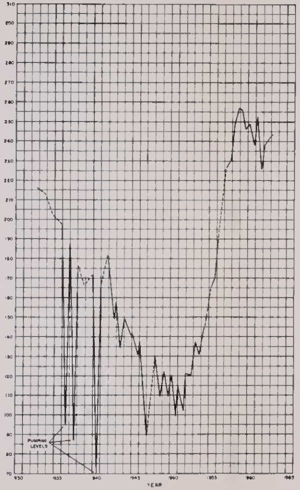
SAN JOAQUIN VALLEY (5-22.00)
LINDMORE IRRIGATION DISTRICT (5-22 28)
WELL 20S/26E-22C2, M.D.B.&M.
GROUND SURFACE ELEVATION 342



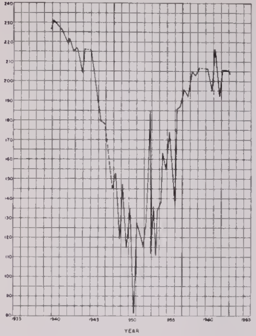
SAN JOAQUIN VALLEY (5-22.00)
LOWER TULE RIVER IRRIGATION DISTRICT (5-22 30)
WELL 21S/26E-10H1, M.D.B.&M.
GROUND SURFACE ELEVATION 355



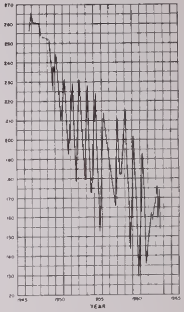
SAN JOAQUIN VALLEY (5-22.00)
DELANO-EARLIMART IRRIGATION DISTRICT (5-22 35)
WELL 24S/26E-32G1, M.D.B.&M.
GROUND SURFACE ELEVATION 398



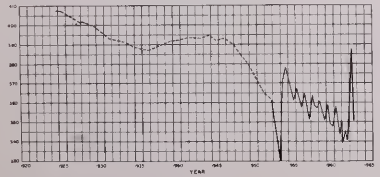
SAN JOAQUIN VALLEY (5-22.00)
SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT (5-22 36)
WELL 25S/26E-28H2, M.D.B.&M.
GROUND SURFACE ELEVATION 414



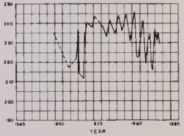
SAN JOAQUIN VALLEY (5-22.00)
NORTH KERN WATER STORAGE DISTRICT (5-22 37)
WELL 27S/25E-22A1 M.D.B.&M.
GROUND SURFACE ELEVATION 392



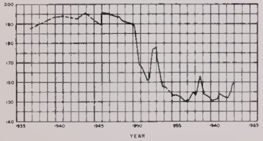
SAN JOAQUIN VALLEY (5-22.00)
PORTERVILLE IRRIGATION DISTRICT (5-22 29)
WELL 22S/27E-10R1, M.D.B.&M.
GROUND SURFACE ELEVATION 467



SAN JOAQUIN VALLEY (5-22.00)
SAUCELITO IRRIGATION DISTRICT (5-22 32)
WELL 22S/26E-15J1 M.D.B.&M.
GROUND SURFACE ELEVATION 371



SAN JOAQUIN VALLEY (5-22.00)
ALPAUGH-ALLENSWORTH AREA (5-22 34)
WELL 24S/23E-21B2, M.D.B.&M.
GROUND SURFACE ELEVATION 206



ELEVATION IN FEET USGS DATUM

LEGEND

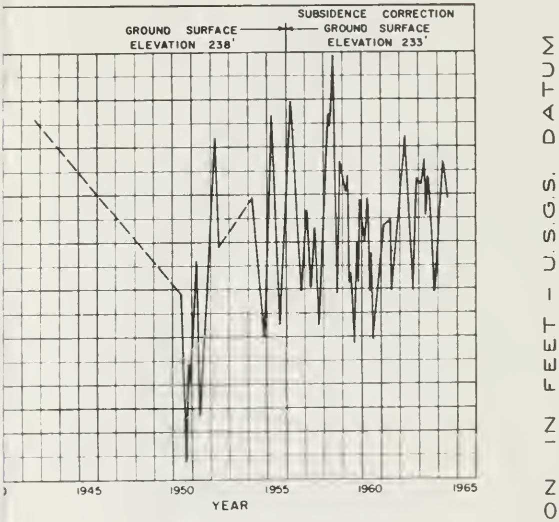
- - - - - - CONNECTS MEASUREMENTS MADE AT INTERVALS OF ONE YEAR OR MORE
———— GROUND LEVEL

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962-1963

FLUCTUATION OF WATER LEVEL
IN SELECTED WELLS IN SAN JOAQUIN VALLEY

SAN JOAQUIN VALLEY (5-22.00)
MENDOTA-HURON AREA (5-22.47)
WELL 17S/16E-24R1, M.D.B.&M.
GROUND SURFACE ELEVATION 238'



LEGEND

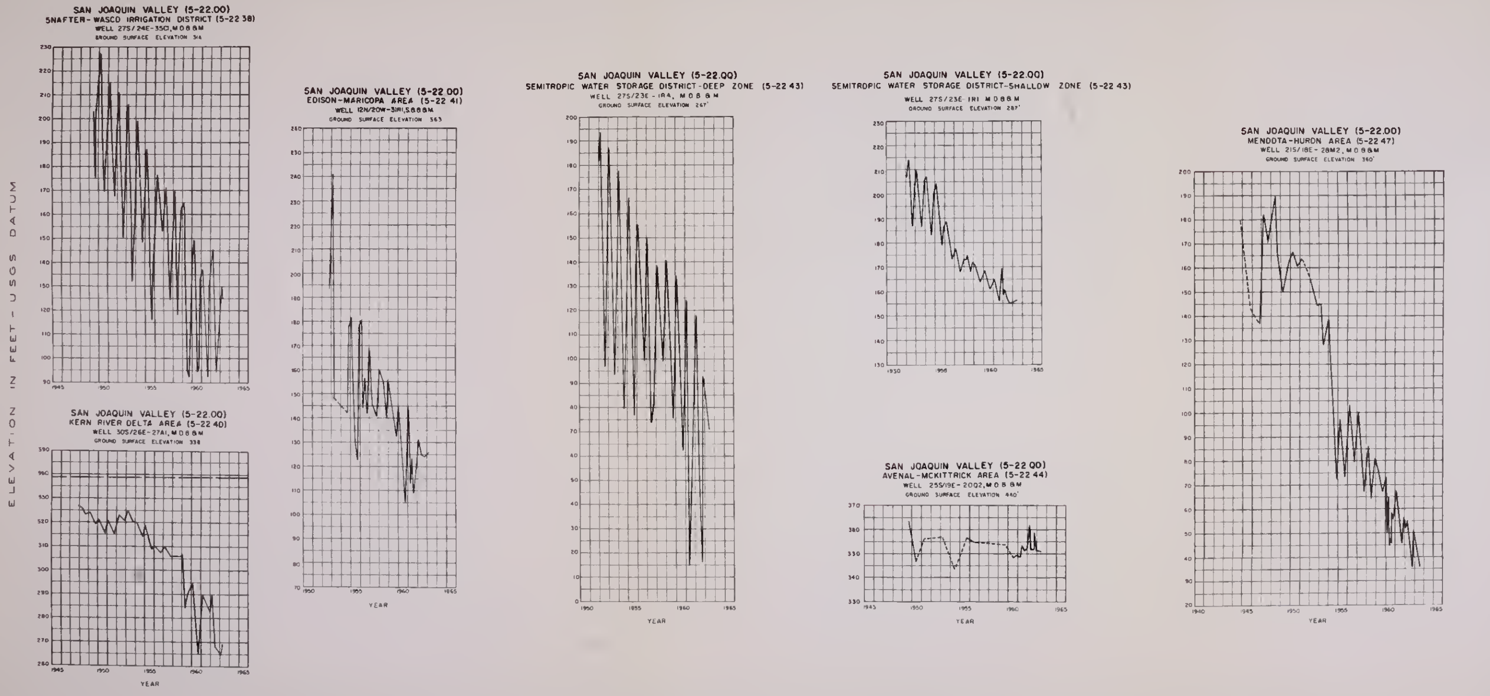
- - - - - CONNECTS MEASUREMENTS MADE AT INTERVALS OF ONE YEAR OR MORE

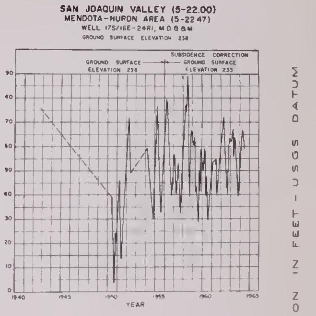
—— —— GROUND LEVEL

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962-1963

FLUCTUATION OF WATER LEVEL
N SELECTED WELLS IN SAN JOAQUIN VALLEY





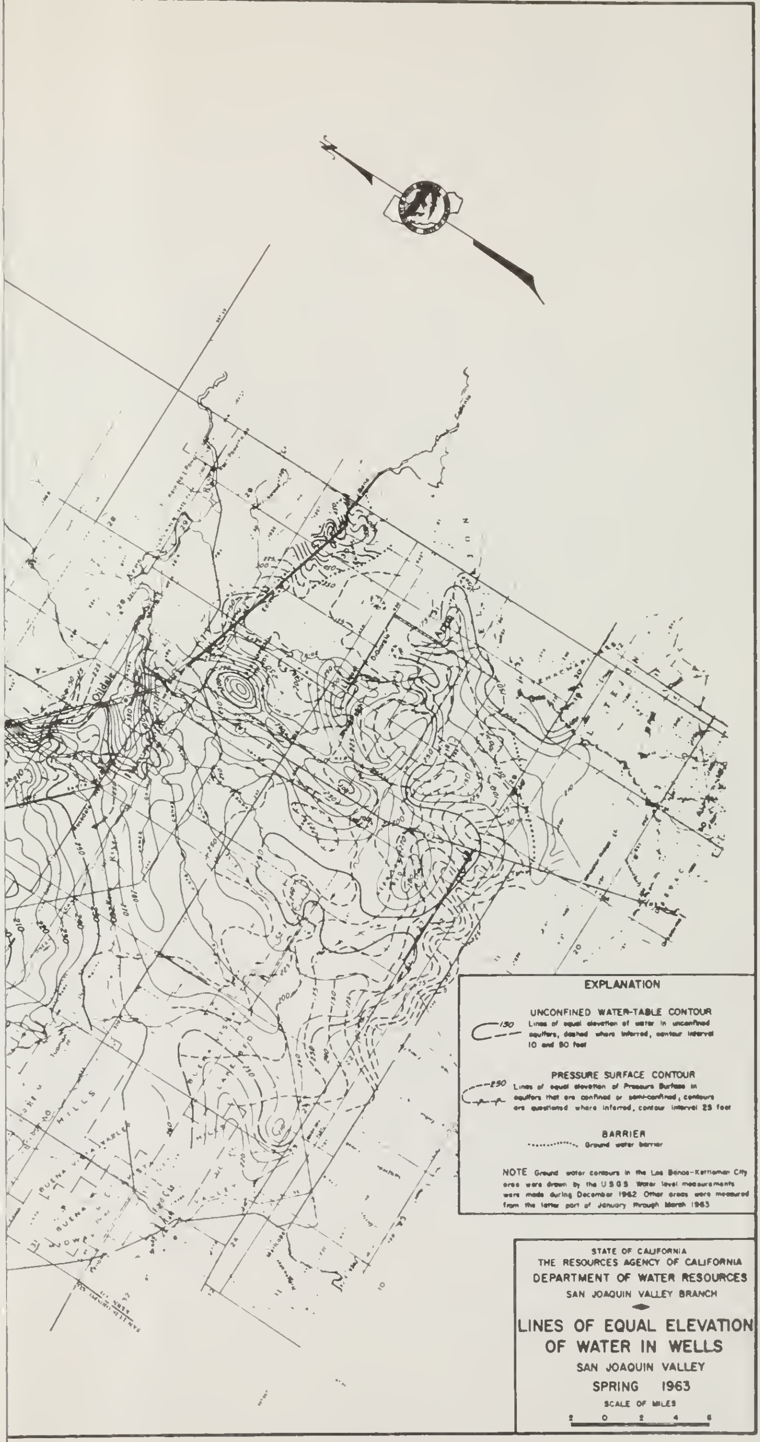
LEGEND

- - - - CONNECTS MEASUREMENTS MADE AT INTERVALS OF ONE YEAR OR MORE
——— GROUND LEVEL

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA 1962–1963

FLUCTUATION OF WATER LEVEL
IN SELECTED WELLS IN SAN JOAQUIN VALLEY


Oildale
BUENA VISTA
HILLS
EXPLANATION
UNCONFINED WATER-TABLE CONTOUR
150
Lines of equal elevation of water in unconfined aquifers, dashed where inferred, contour interval 10 and 50 feet
PRESSURE SURFACE CONTOUR
250
Lines of equal elevation of Pressure Surface in aquifers that are confined or semi-confined, contours are questioned where inferred, contour interval 25 feet
BARRIER
Ground water barrier
NOTE Ground water contours in the Los Banos-Kettleman City area were drawn by the U S G S Water level measurements were made during December 1962 Other areas were measured from the latter part of January through March 1963
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
LINES OF EQUAL ELEVATION OF WATER IN WELLS
SAN JOAQUIN VALLEY
SPRING 1963
SCALE OF MILES
2 0 2 4 6


SAN JOAQUIN VALLEY
SAN JOAQUIN VALLEY
EXPLANATION
UNCONFINED WATER-TABLE CONTOUR
PRESSURE SURFACE CONTOUR
BARRIER
NOTE
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
LINES OF EQUAL ELEVATION
OF WATER IN WELLS
SAN JOAQUIN VALLEY
SPRING 1963
SCALE OF MILES


SAN JOAQUIN VALLEY

SAN JOAQUIN VALLEY
TULARE LAKE BED
KETTLEMAN
ANTELOPE PLAIN
EXPLANATION
UNCONFINED WATER-TABLE CONTOUR
130
PRESSURE SURFACE CONTOUR
250
BARRIER
Ground water barrier
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH
LINES OF EQUAL ELEVATION OF WATER IN WELLS
SAN JOAQUIN VALLEY
SPRING 1963
SCALE OF MILES
2 0 2 4 6

Surfa

Stati

Big Creek
Chowchilla
Delta-Mend
Delta-Mend
Fresno Riv
Kaweah Riv
Kern River
Kern River
Kern River
Kings Rive
Kings Rive
Kings Rive
Merced Riv
Merced Riv
Salt Sloug
San Joaqui
San Joaqui
San Joaqui
San Joaqui
San Joaqui
San Joaqui
San Joaqui
San Joaqui
San Joaqui
Stanislaus
Stanislaus
Tule River
Tuolumne R
Tuolumne R
Tuolumne R

a Not show
boundary
transfer
July 1,

b Conducti
water st

c Disconti

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA

LOCATION OF SURFACE WATER SAMPLING AND RECORDER STATIONS

Plate D-1

Surface Water Sampling and Recorder Stations

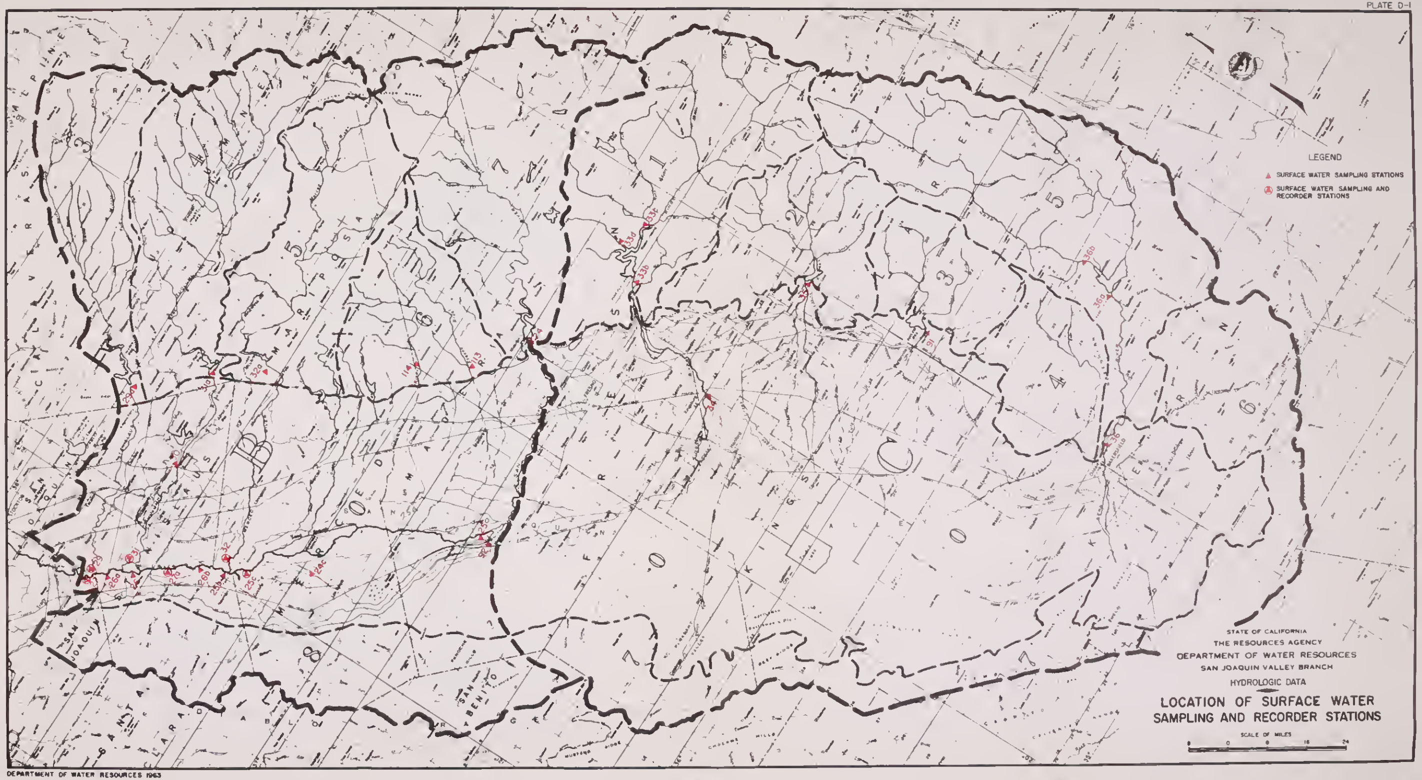
Station name	Station number
Big Creek above Pine Flat Dam	33d
Chowchilla River near Raymond	114
Delta-Mendota Canal near Mendota	92
Delta-Mendota Canal near Tracy[a]	93
Fresno River near Daulton	113
Kaweah River below Terminus Dam	35
Kern River near Bakersfield	36
Kern River below Isabella Dam	36a
Kern River at Kernville	36b
Kings River below North Fork	33c
Kings River below Peoples Weir	34
Kings River below Pine Flat Dam	33b
Merced River below Exchequer Dam	32a
Merced River near Stevinson[b]	32
Salt Slough at San Luis Ranch	24c
San Joaquin River at Crows Landing Bridge	26b
San Joaquin River at Fremont Ford Bridge[b]	25c
San Joaquin River at Friant Dam	24
San Joaquin River near Grayson	26
San Joaquin River at Hills Ferry Bridge[c]	25b
San Joaquin River at Maze Road Bridge	26a
San Joaquin River near Mendota	25
San Joaquin River at Patterson Bridge[b]	27a
San Joaquin River near Vernalis[b]	27
Stanislaus River near Mouth[b]	29
Stanislaus River below Tulloch Dam	29a
Tule River below Success Dam	91
Tuolumne River below Don Pedro Dam	31a
Tuolumne River at Hickman-Waterford Bridge	30
Tuolumne River at Tuolumne City[b]	31

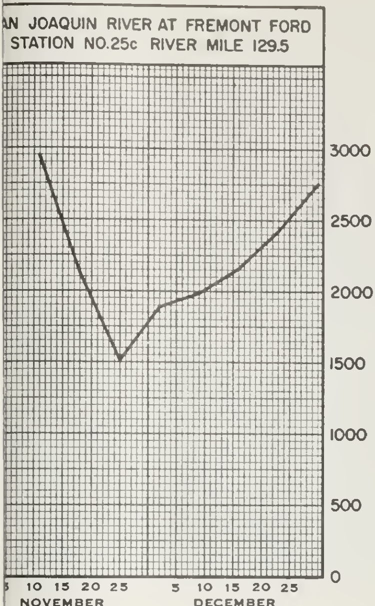
a Not shown on plate as station is outside of branch boundary. Originally monitored by Delta Branch, transferred to San Joaquin Valley Branch as of July 1, 1963.

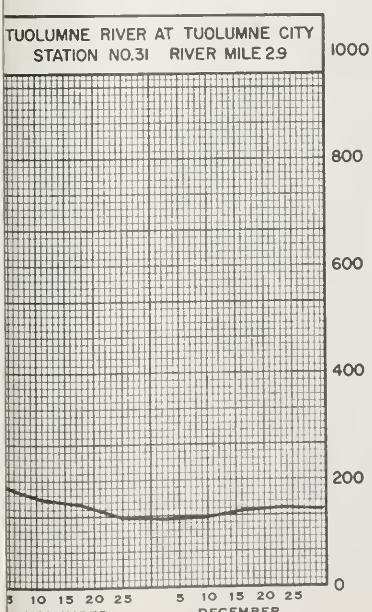
b Conductivity recorder installed at this surface water station.

c Discontinued as of July 1, 1963.

PLATE D-1



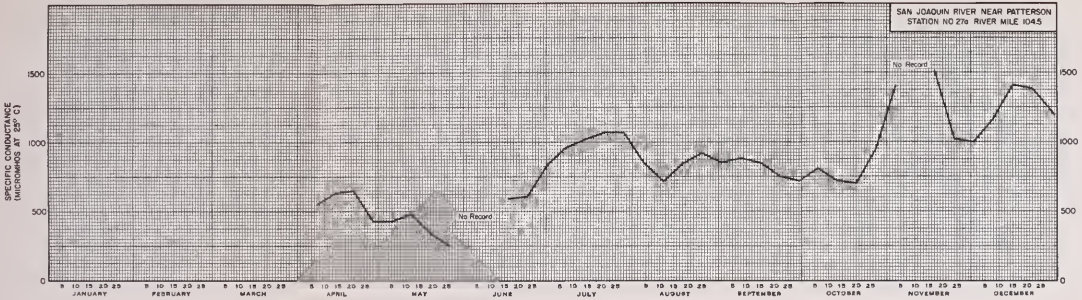


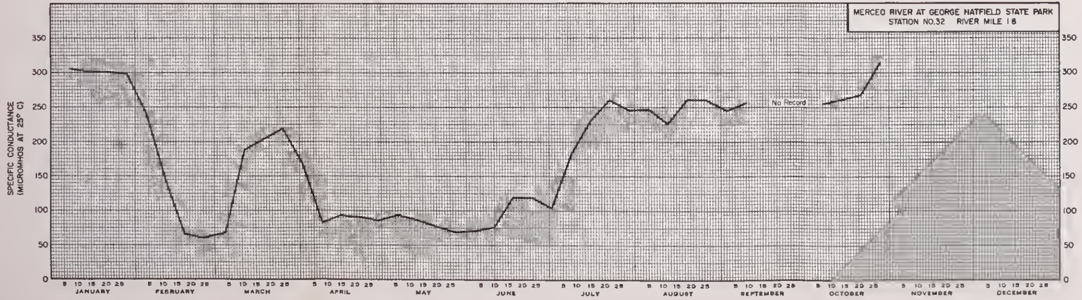


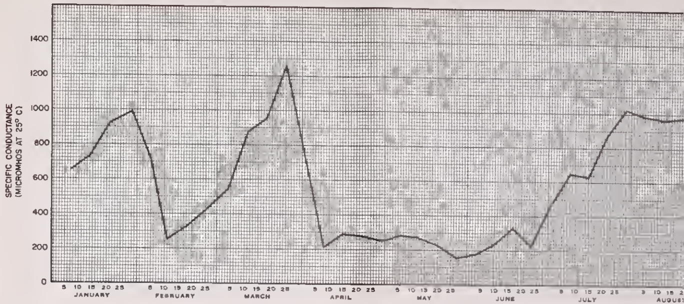
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

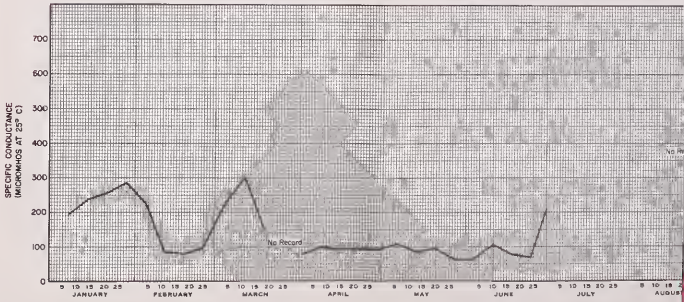
HYDROLOGIC DATA

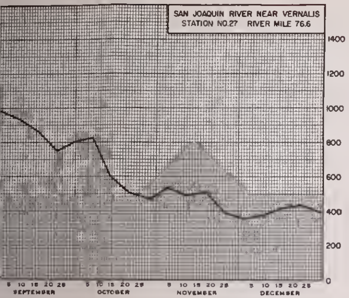
WEEKLY MEAN SPECIFIC CONDUCTANCE
AT SELECTED STATIONS
SAN JOAQUIN VALLEY
1963

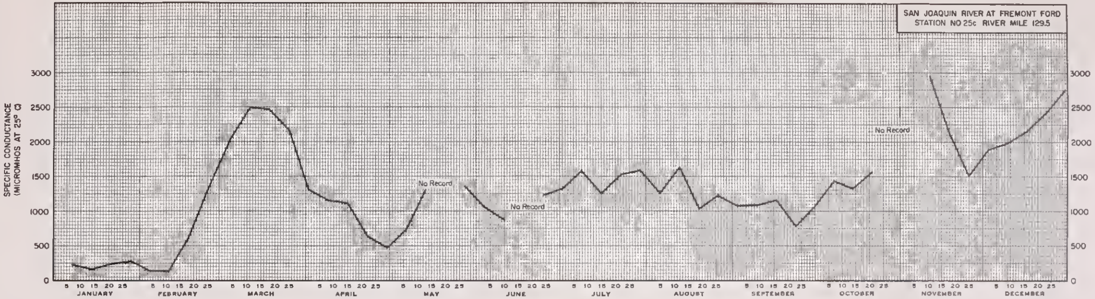

SAN JOAQUIN RIVER NEAR PATTERSON
STATION NO 27a RIVER MILE 104.5
SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)
No Record
No Record
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

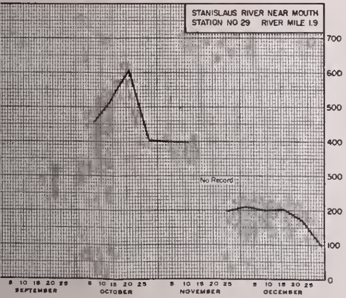

MERCED RIVER AT GEORGE HATFIELD STATE PARK
STATION NO.32 RIVER MILE 1.8
SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)
No Record
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

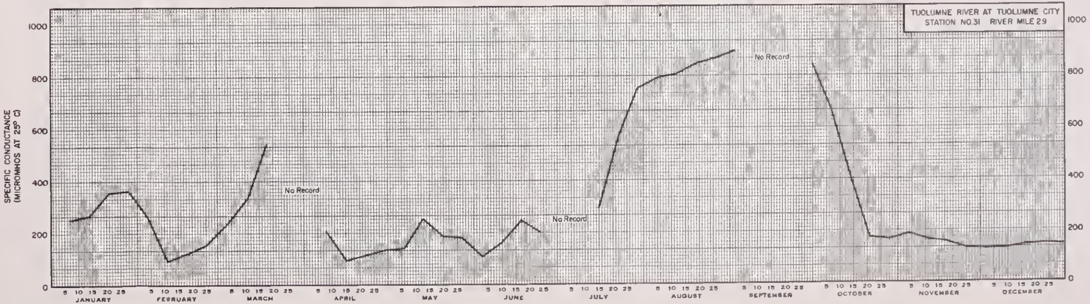

SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY


SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)
No Record
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY







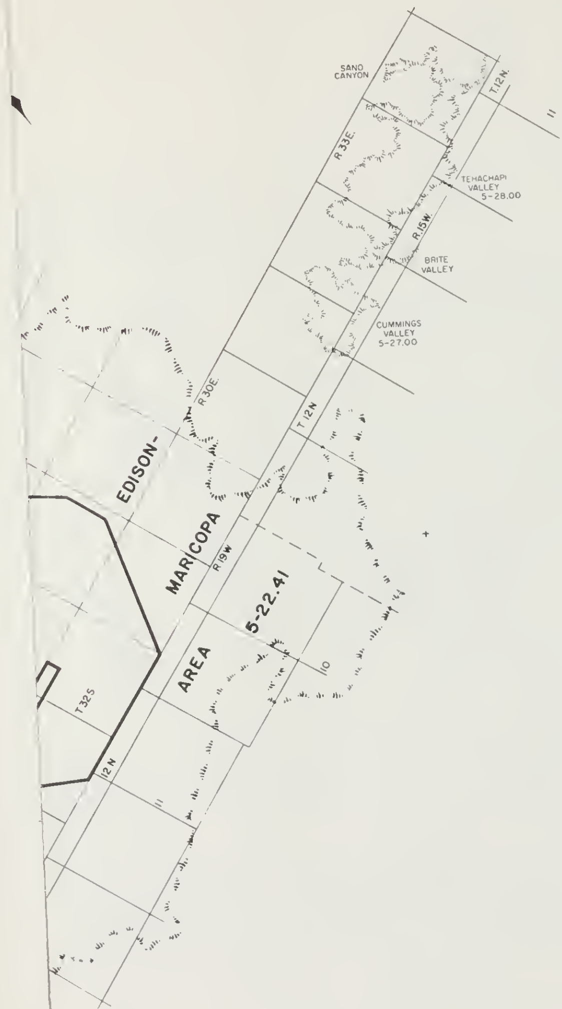


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA

WEEKLY MEAN SPECIFIC CONDUCTANCE AT SELECTED STATIONS SAN JOAQUIN VALLEY

1963

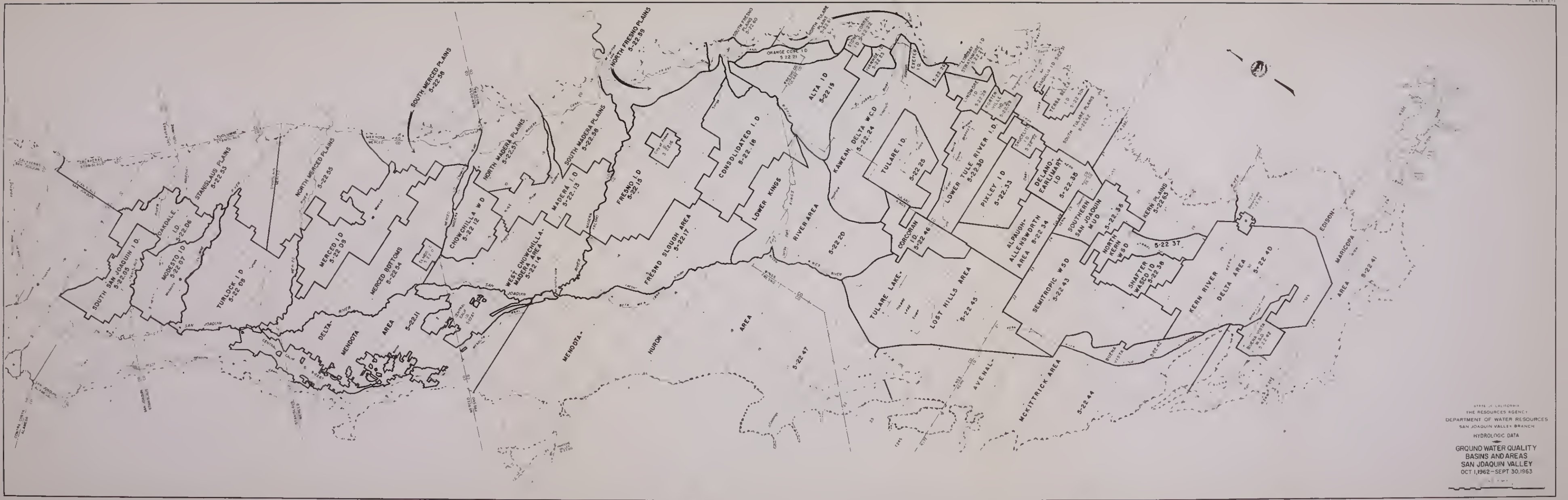


STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN JOAQUIN VALLEY BRANCH

HYDROLOGIC DATA

GROUND WATER QUALITY
BASINS AND AREAS
SAN JOAQUIN VALLEY
OCT. 1, 1962 – SEPT. 30, 1963

SCALE OF MILES
6 0 6



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BASINS AND AREAS
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OCT 1, 1962—SEPT 30, 1963

LEGEND.

400 — VALUES SHOWN ARE ELECTRIAL CONDUCTIVITY MEASURED AS MICROMHOS $EC = K \times 10^6$

1250 — INDICATES ESTIMATED LOCATION

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HYDROLOGIC DATA

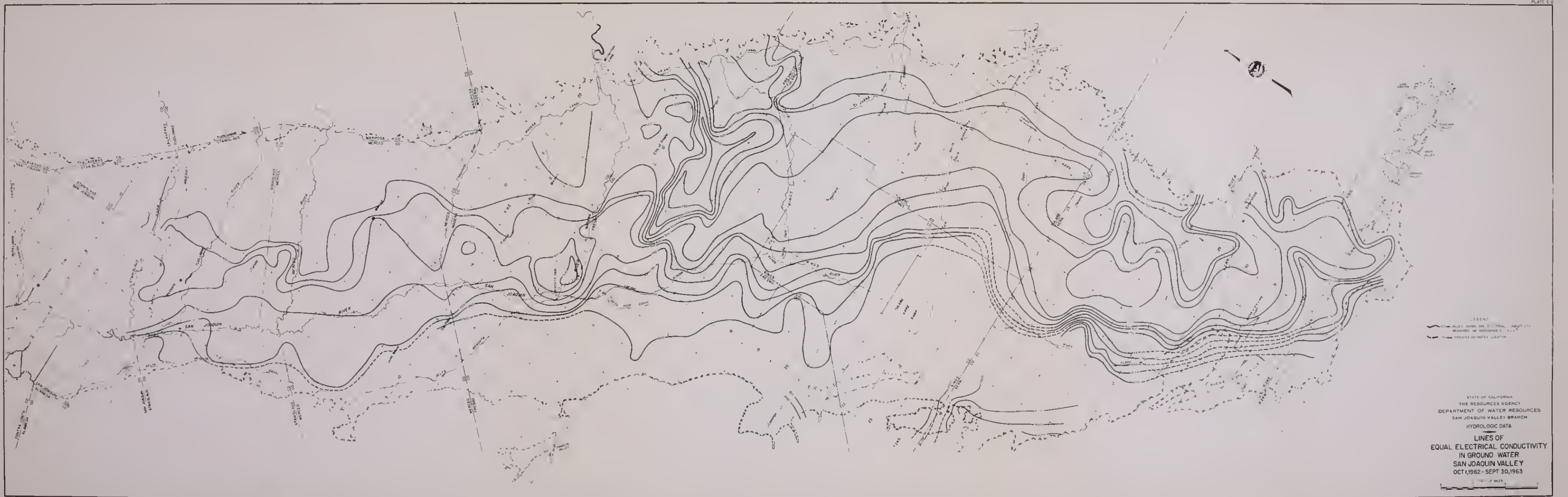
LINES OF EQUAL ELECTRICAL CONDUCTIVITY IN GROUND WATER SAN JOAQUIN VALLEY

OCT. 1, 1962 – SEPT. 30, 1963

SCALE OF MILES

6 0 6 12

PLATE E-2



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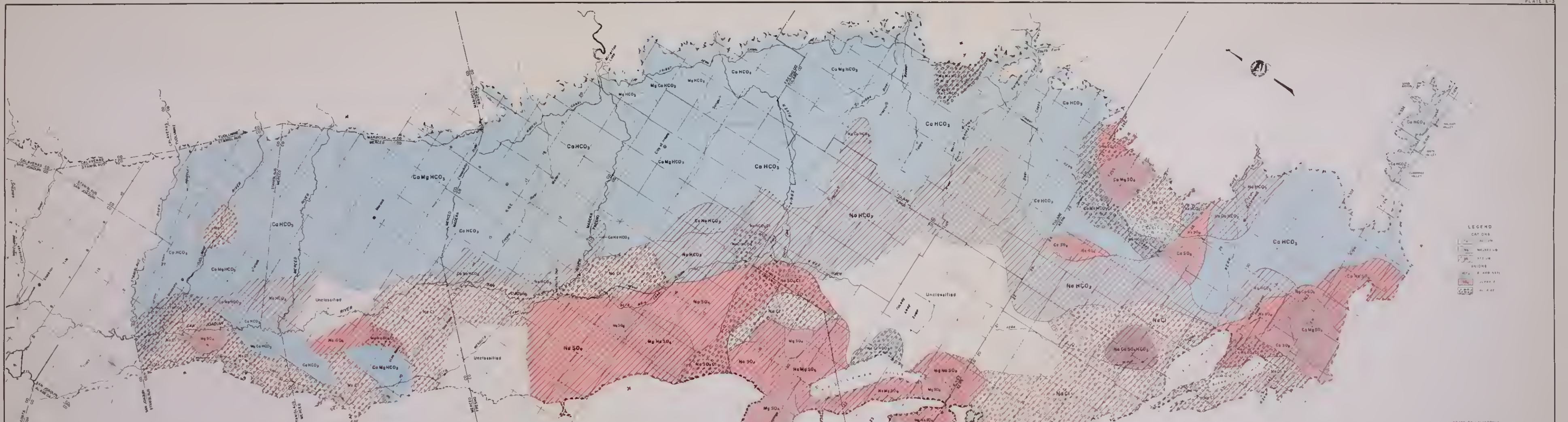
HYDROLOGIC DATA

MINERAL TYPES OF GROUND WATER

OCT. 1, 1962 – SEPT. 30, 1963

SCALE OF MILES

6 0 6 12



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